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Mammal recolonization and recovery following the Woolsey Fire

A thesis submitted in partial satisfaction of the requirements for the degree of Master of Science

in Biology

by

Chloe Morgane Nouzille

2022

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ABSTRACT OF THE THESIS

Mammal recolonization and recovery following the Woolsey Fire

by

Chloe Morgane Nouzille

Master of Science in Biology

University of California, Los Angeles, 2022

Professor Daniel T. Blumstein, Chair

Many ecosystems, including California's Mediterranean ecosystem, are fire-adapted. However, climate change and other anthropogenic effects are changing fire regimes, which may have implications for fire effects on natural ecosystems, including how wildlife recovers following fires. Although many studies have looked at the fire effects on vegetation, few have looked at mammal recovery, and fewer have investigated the compounding effects of an urbanized, fragmented habitat. We used camera traps and dynamic occupancy modeling to quantify medium to large mammals occurrence in the Santa Monica Mountains and Simi Hills over time. We investigated how occupancy varies relative to whether a site was burned in the Woolsey Fire, the proximity of development, and the distance to the burn perimeter. Distribution relative to the burn area and urbanization were distinct to each target species, calling for equally distinct and likely multiple management practices to conserve these species.

The thesis of Chloe Morgane Nouzille is approved.

Seth Phibbs Riley

Morgan Winn Tingley

Gregory F. Grether

Daniel T. Blumstein, Committee Chair

University of California, Los Angeles

2022

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Introduction

California's Mediterranean ecosystem has evolved with fire and is adapted to a specific fire regime (Keeley et al. 2005, Syphard et al. 2009). Historically, fires in California scrubland systems occurred at a low frequency and started during the summer by lightning strikes (Keeley & Fotheringham 2001, Keeley 2002). However, following southern California's extensive urban development over the past decade (U.S. Census), fire frequency in coastal shrublands has increased an order of magnitude above historic levels, with the vast majority of fires caused by human ignition (Keeley et al. 2005, Balch et al. 2017). Although most fires start in summer and the majority of area burned is during the fall, human-ignited fires have expanded the western fire season into late spring and early winter (Keeley & Fotheringham 2001, Keeley & Syphard 2006a). Extreme offshore winds, specifically the Santa Ana winds, quickly dry vegetation, creating fuel and allow wildfire to move rapidly over large areas (Balch et al. 2017, Williams et al. 2019). Fuel accumulation has also been exacerbated by an effective fire exclusion policy (Steel et al. 2015) that extinguishes almost all fires before they reach 120 ha (Calkin et al. 2005). The result is reduced overall fire occurrence and area burned (Mallek et al. 2013, Safford and Van de Water 2013) which has increased the risk for large fires at a later date (Piñol et al. 2005). Eighteen of California's twenty most destructive fires in history have occurred in the last two decades, and eleven are due to anthropogenic ignitions (CAL FIRE 2020). The increase in the human population, urban expansion, and climate change, increases the frequency and ferocity of these wildfires (Hammer et al. 2007, Williams et al. 2019).

Wildfires have consequential effects on wildlife populations by directly killing individuals, destroying habitat and eliminating food resources (Lyon et al. 2000), but several factors

determine the magnitude of these effects. These include the extent of change in habitat structure and plant species composition and fire characteristics such as its severity, intensity, rate of spread, uniformity, and size (Lyon et al. 2000).

Urbanization can also affect wildlife as one of the primary contributors to habitat fragmentation and is implicated in population decline (Crooks 2002, Brunton et al. 2020, Schmidt et al. 2020) and reduced gene flow, as seen in puma (*Puma concolor*) populations in southern California (Gustafson et al. 2018, Riley et al. 2014). Fragmentation is likely to affect post-fire recovery because faunal recolonization of a burn area depends on the maintenance of connections to populations outside the burn perimeter (van Mantgem et al. 2015).

Since we assume that animals have adapted to historical fire regimes, changes to those regimes may harm populations and alter ecosystems (Lyon et al. 2000) by decreasing forage and eliminating shelters, limiting the capacity for recolonization, and in the case of severe fires, directly increasing mortality (Nimmo et al. 2019). Chaparral communities require two or more decades to recover from fire, but this recovery has been impacted by increased fire frequency (Keeley et al. 2009) — the primary fire regime change in areas of high population (Keeley & Fotheringham 2001). Although much of Southern California's flora can tolerate long fire return intervals, it is poorly adapted to frequent fires (Keeley and Brennan 2012) which can result in conversion from native shrubland to an invasive grassland (Pausas & Keeley 2014). These fire regime changes can directly affect soil-insulated animals, by impacting vulnerable life stages such as nest-building, offspring rearing, or juvenile survival (van Mantgem et al. 2015).

However, indirect effects can have much more profound consequences than the fire itself (Smith

et al. 2000), because shortened fire-return intervals may drive the homogenization of vegetation structure (Keeley et al. 2005).

Herbivores, especially browsing animals like deer (*Odocoileus spp.*), tend to respond favorably to fires because fires stimulate a temporary increase in young, nutritious forage (van Mantgem et al. 2015, Smith et al. 2000). There is little information about medium-sized mammal fire recovery in North America, but one rural study, that collected detection-non-detection data three years after a fire, found that coyote (*Canis latrans*), bobcat (*Lynx rufus*), gray fox (*Urocyon cinereoargenteus*), and striped skunk (*Mephitis mephitis*) populations remained constant across burned and unburned areas (Schuette et al. 2014). This was attributed to the behavioral plasticity of these generalist carnivores (Schuette et al. 2014). In large carnivores, Jennings et al. (2015) reported that pumas used burned areas opportunistically presumably due to frequent visits by mule deer (*O. hemionus*).

Although responses are species-specific, the interacting disturbances of wildfire and fragmentation creates the potential for synergistic effects that may threaten species in urban areas (Jennings et al. 2015). Carnivores may play an integral role in ecosystem integrity, and their local decline or extinction can cause cascading consequences (Crooks & Soulé 1999, Ripple et al. 2014), which could be exacerbated by fragmentation (Ordeñana et al. 2010). To help identify potential synergistic threats, a better understanding of their post-fire recovery in fragmented habitats is critical. This includes an occupancy measurement of each mammal species in burned and unburned areas and identifying prominent factors that may influence it, such as habitat preferences, species interactions, distance to burn, and the distance to the urban perimeter.

Many studies have demonstrated camera traps' effectiveness as a non-invasive way to learn about species distribution, abundance, density, diversity, and movement of elusive species across a wide variety of habitat types (Rovero 2016). Although camera traps are ideal for studying medium to large wildlife species (Tobler et al. 2008, Rovero 2016), reliable surveys depend on several factors such as deployment protocols, sampling design, modeling or analytical assumptions, and species behavior (Rowcliffe et al. 2011, Burton et al. 2015). A common problem in camera trap surveys is imperfect detection: when the animal does not pass through the camera trap detection zone or they do pass through the detection zone, but the camera is not triggered or triggered too late (Burton et al. 2015, McIntyre et al. 2020). Imperfect detection is usually incorporated into occupancy models (as long as the assumptions are met (Mackenzie et al. 2018, Sollmann 2018, McIntyre et al. 2020)), by using probability-based sampling and taking target animal behavior into consideration (Burton et al. 2015).

The Santa Monica Mountains and Simi Hills in Southern California are situated in an urbanized landscape, fragmented by major freeways and extensive housing, and subject to increasingly frequent fires. Recently, the area was devastated by the Woolsey Fire in November 2018, which consumed over 38,000 ha (CAL FIRE 2020), making it 2.5 times larger than the second largest fire to affect the Santa Monica Mountains (the Green Meadows Fire in 1993). This area is an ideal place to study wildlife recovery post-fire in an area fragmented by urbanization.

We investigated how medium and large mammals of the Santa Monica Mountains and Simi Hills recovered after the Woolsey fire. The objective was to quantify occupancy and investigate the influence of two primary factors, fire disturbance and urbanization. Specifically, we asked

whether there was variation in occupancy between burned and unburned areas and, if so, which factors best explained occupancy.

The relationship between occupancy, fire disturbance, and urbanization was predicted to be species-specific. Predictions were based on the results of previous work that investigated carnivore and omnivore occurrence in relation to proximity and intensity of urbanization (Dunagen et al. 2019, Jennings et al. 2015, Ordeñana et al. 2010, Riley et al. 2003). We predicted a negative relationship between distance to urban edge and the occurrence of coyotes, striped skunks, and raccoons and positive relationships between distance to urban edge and occurrence for bobcats, gray foxes, and mountain lions. Virginia opossums are expected to show little, if any response to urban proximity. We also predicted occupancy for most target species to increase with time since fire at burned sites as the vegetation recovered, with the exception of mule deer, which may show a higher initial occupancy at burned sites associated with the flush of new vegetative growth. Mountain lions may also show higher preference for burned areas in response to an influx of mule deer. Other studies report higher rabbit activity and density in burned areas (Foster et al 2015, Lochmiller et al 1991), so it is possible their predators, such as bobcats and grey foxes would also exploit burned areas for better hunting opportunities.

Methods

Study area and study species

From July 2019 to September 2021, camera traps were established to survey for rabbits (*Sylvilagus spp.*), bobcats, coyotes, striped skunks, Opossums (*Didelphis virginiana*), raccoons (*Procyon lotor*), gray foxes, mountain lions, and mule deer (*Odocoileus hemionus*) in the Santa

Monica Mountains and the core natural area in the Simi Hills (i.e., which did not include the fragmented patches.) The study was conducted within the boundaries of the Santa Monica Mountains National Recreation Area, a national park in southern California just northwest of Los Angeles (Figure 1).

Camera locations were determined by a master park-wide Generalized Random Tessellation Stratified (GRTS) point draw to ensure a spatially balanced design. Each site was evaluated in the field and either accepted as a camera site or rejected in the order they were drawn until 180 locations were accepted. Reasons for rejection included i) if the point was outside the study area, ii) if the point was on private or inaccessible land, iii) the maximum number of points for that habitat or treatment class were met, iv) the total there and back travel time was more than 4 hours, or v) the terrain within the buffer or on the approach to the location was too steep or otherwise unsafe. Seventy-five percent of the sites were placed in burned areas and twenty-five percent were placed in unburned areas as control sites (Figure 1). Both burned and unburned areas were also divided into three habitat types based on pre-fire vegetation: grassland, shrubland, or riparian (Table 1). Preliminary camera trap photos highlighted some detection issues, so the deployment protocol was modified to address them as described in the camera establishment protocol below.

Camera establishment protocol

Camera sites were established along game trails and social trails that showed signs of animal use (e.g., tracks or scat) or park trails that were likely to be used by wildlife, within a 100 m buffer of the GRTS point. No two sites were within 200 m of each other. Sites consisted of a

semipermanent post and a camera inside a metal security box bolted to the post. The posts were 1.5 m segments of unistrut, driven 30-60 cm into the ground. Camera traps were set between 15 - 60 cm off the ground, depending on the slope. They were angled at about 45° and placed within 4.5 m of the trail to maximize the detection window. Sixty Reconyx professional game cameras (Hyperfire 2 Covert IR camera traps) were deployed at sixty sites at a time and were rotated to new sites every thirty days so that all one hundred and eighty sites were monitored for one month at a time, four times per year. Camera settings were adjusted so each time the camera was triggered by motion and heat, it took two photos with no delay between trigger events.

Data processing

Photos were archived and separated using Microsoft's Megadetector (Beery et al. 2019) into categories: animal, human, vehicle, and blank (i.e., no animal present or triggered by wind and heat). Animal photos were tagged with the species detected using Zooniverse (www.zooniverse.org). Customized Python (v 3.9.4; van Rossum & Drake, 2010) scripts were used to upload photos into Zooniverse. Any photos within 5 minutes of each other were grouped together to denote one trigger event (i.e., subject set) with a maximum of 8 photos. If there were more than 8 photos, for example, a deer resting in front of the camera triggered several hundred photos, 8 were randomly chosen to upload into Zooniverse. Once uploaded, at least 7 (max. 10) different community scientists looked at each photo and classified the species. Once all photos were tagged, Zooniverse classification data were exported using Python scripts, and only those photos which had a consensus (>66%) among the community scientists for the species tag were used in the data analysis. These data were then used to create presence-absence detection

histories for each target species and run single-species, multi-season occupancy models for each species (Mackenzie et al. 2018).

Modeling Approach

We created a dynamic occupancy model, or multi-season occupancy model, for each target species using a frequentist approach to measure occupancy and detectability for each target species (Mackenzie et al. 2003). Since cameras were operating continuously over the total study period and because the multi-season occupancy framework requires equal survey periods, detection histories were created by dividing the total study period (~ 2 years) into equal surveys so that presence or absence of a species was measured on a weekly basis. Thus, multiple detections in a day or on multiple consecutive days were recorded as only one detection per 7-day survey. In the occupancy framework, the “season”, or primary period (Mackenzie et al. 2018), worked out to 14 weeks and the secondary periods, or “surveys”, were aggregations of 7 camera trapping days. The true occurrence status, z (1 or 0), of a site j , is modeled as

$$z_{j1} \sim \text{Bernoulli}(\psi_1)$$

where ψ_1 is the probability of occurrence in the first season ($t=1$).

Occurrence status was assumed to stay constant for all k survey intervals within a primary period but can change between primary periods. After setting the true initial occurrence (z_{j1}), occupancy in the following seasons depends solely on modeled probabilities of colonization and extinction (Mackenzie et al. 2003). Colonization (γ) was defined as when the occupancy status

of a site changes from unoccupied to occupied, and extinction (ϵ ; or 1 minus persistence) was defined as when an occupied site becomes unoccupied (Mackenzie et al. 2018). Changes in occupancy over time periods, t , are modeled as a Markov process (Mackenzie et al. 2018) where:

$$z_{jt} \sim \begin{cases} \text{Bernoulli}(\gamma_{t-1}) & \text{if } z_{j(t-1)} = 0 \\ \text{Bernoulli}(1 - \epsilon_{t-1}) & \text{if } z_{j(t-1)} = 1 \end{cases}$$

For $t = 2, 3, \dots, T$

A survey event k at site j , in season t , gives observations, y_{jkt} (0 or 1), which are assumed to be imperfect representations of the true occurrence status. Thus, observed occurrence, y_{jkt} , is modeled as a Bernoulli distributed random variable

$$y_{jkt} \sim \text{Bernoulli}(z_{jt} p_{jkt})$$

where p_{jkt} is the probability of detection at a site during a given survey.

Probabilities of detection, occupancy, colonization, and extinction are modeled as logit-link functions of covariates. In the dynamic occupancy framework, detection can be modeled as a function of site-specific, survey-specific, or primary period-site specific covariates (Mackenzie et al. 2018). Colonization and extinction can be modeled as functions of site and primary period-site specific covariates, but occupancy can only be modeled as a function of site-specific covariates (Mackenzie et al. 2018).

We investigated whether detection varied as a function of an intercept and additive six covariates: pre-fire vegetation type (i.e., shrubland, grassland, or riparian), fire status (burned or unburned in the Woolsey Fire), time since fire or fire age (measured in weeks), wet (i.e., May - October) or dry season (i.e., November - April), and ordinal day of year, fitted as a linear and quadratic term, to allow for the possibility of non-monotonic relationship.

$$\text{logit}(p_{jk}) = \alpha_0 + \alpha_{veg} veg_j + \alpha_{fst} fst_j + \alpha_{fa} fa_k + \alpha_{seas} season_k + \alpha_{doy} doy_j + \alpha_{doy2} doy_j^2$$

Probability of initial occupancy of a site was modeled as a function of an intercept and four covariates: vegetation type, fire status, distance to urban edge (in meters), and distance to burn edge.

$$\text{logit}(\psi_{1j}) = \alpha_0 + \alpha_{veg} veg_j + \alpha_{fst} fst_j + \alpha_{du} distU_j + \alpha_{dB} distB_j$$

Distances to the urban or burn edge were calculated in R (4.0.4; R Core Team 2021) using the following packages: sf (Pebesma 2018), mapview (Appelhans et al. 2021), rgeos (Bivand & Rundel 2021), raster (Hijmans 2022), lattice (Sarkar 2008), rasterVis (Lamigueiro & Hijmans 2022), rgdal (Bivand et al 2021), geosphere (Hijmans 2021), and tigris (Walker 2022).

Colonization and extinction were each modeled as functions of seven covariates: vegetation type, fire status, distance to urban edge, distance to burn edge, time since fire, wet or dry season, and an interaction between fire status and time since fire. All continuous variables were standardized to a mean of 0 and standard deviation of 1.

We fitted single-species, multi-season models to the data using the R statistical programming language (v 4.0.4; R Core Team 2021) and the package unmarked (Fiske and Chandler 2011). Model selection and fitting was done in two stages (MacKenzie et al. 2018). The first stage aimed to define the best parameterization of detection and initial occupancy, while avoiding over-fitting. For this first stage, we fit candidate occupancy and detectability models using the full parameterization (i.e., all covariates) of colonization and extinction, and ranked these results according to Akaike's information criterion (AIC) to assess model fit. If no models fit using the full parameterization (e.g., all models failed to converge), then we used the null parameterization of colonization and extinction. The second stage used the best detection and initial occupancy parameterization and we used model selection on all combinations of colonization and extinction variables. In both stages, models that did not fit well (e.g., implausibly large standard errors) or did not converge (e.g., maximum likelihood errors generated) were eliminated, and normal model selection was conducted on the reduced, converged, model set (Burnham and Anderson 2002). In total, we tested 512 combinations of detection and initial occupancy parameterizations in stage 1 and 6241 combinations of colonization and extinction parameterizations in stage 2 (see Supplementary Materials). At the end of stage two, the lowest-ranked model by AIC was retained as the most parsimonious for each species. All models within 2 AIC units were averaged with shrinkage to examine at how parameters are predicted to change with covariates (Burnham and Anderson 2002).

Results

Results reported here represent 112 surveys over 2 years at 180 sites for which we documented 7407 detections for 7 species (Table A1). Survey effort included 784 capture nights using 60

cameras rotated between sites. No site detected all target species. Total detections per target species varied greatly from 59 for mountain lions to 1426 for gray foxes. We list the most parsimonious models for each of the 7 species (Tables 2-29) which indicated that each parameter was affected by different factors for each species. Although we detected other species, such as raccoons, spotted skunks (*Spilogale putorius*), badgers (*Taxidea taxus*), and long-tailed weasels (*Mustela frenata*), there were not enough detections to fit multi-season (i.e., dynamic) occupancy models.

Mule deer

Mule deer were found across the study area with 889 detections (1 detection = at least 1 deer detection in a seven-day period) in 112 weeks at 142 sites (Figure 2). Candidate model parameterizations of detectability and initial occupancy revealed strong support for 5 similar models (all within 2 AIC units of each other) that made up 63% of the total model weight. There was no single top model for detectability and initial occupancy, but all top models included vegetation type and most included fire status as a detectability covariate (Table 2). Almost all initial occupancy models did not retain any covariates (Table 2).

Cumulative AIC weight of shows how many models (regardless of their delta AIC) included each covariate and can delineate their relative importance to each parameter. For mule deer, cumulative weight shows that none of the tested variables had support as a covariate of initial occupancy except for weak support for distance to urban edge (Table 3). A total of 81% of AIC weight supported initial occupancy models with no covariates (i.e., a random process with a fixed probability). Cumulative weights for covariates of detectability showed very strong support

for vegetation and strong support for fire status (Table 3). There was very little support (AIC wt < 0.01) for models with detectability as a random process at a fixed probability. The top model selected (AIC weight = 0.24, AIC = 2051.9), and subsequently used for colonization and extinction models, retained vegetation and fire status as a covariate for detectability and no covariates for initial occupancy.

Model averaging showed that the average probability of deer detection was 0.28, with detectability higher at burned sites than unburned sites and higher in riparian vegetation than shrubland or grassland (Figure 3c-d). Initial average occupancy probability was relatively high (0.59) with almost no difference between unburned and burned sites (Figure 3a), and a weak positive relationship with distance to urban edge (Figure 3b).

There were 50 similar candidate models for colonization and extinction within 2 AIC units, representing 25% of the total model weight. There was no single top model for colonization and extinction, and although there was no clear trend among the top model covariates for extinction, most of the models included fire status as a covariate for colonization (Table 4).

Cumulative AIC weight was broadly distributed amongst all variables with no strong support (> 0.5) for any of the tested variables as covariates of extinction (Table 5). However, there was strong support for vegetation, fire status, and fire age as covariates of colonization. Despite the lack of clear resolution on variable importance, there was very little support for models that had either colonization (0.01) or extinction (0.16) as a random process at a fixed probability (i.e., models with no covariates).

Model averaging shows relatively low average probabilities of colonization (0.20) and local extinction (0.14), but both probabilities were higher at unburned sites than at burned sites (Figure 4b, e) and a weak negative relationship with time since fire (Figure 4 a, d). Probability of mule deer colonization was also higher in riparian vegetation than shrubland or grassland (Figure 4c).

Gray fox

Gray foxes were the most commonly detected target species with 1426 detections in 112 weeks at 142 sites (Figure 5). Candidate model parameterizations of detectability and initial occupancy revealed strong support for 6 similar models (within 2 AIC units of each other) that made up 28% of the total model weight. There was no single top model for detectability and initial occupancy but all top models included fire status and several had distance to burn edge as an initial occupancy covariate (Table 6). Season was included in almost all top models as a detectability covariate (Table 6).

Cumulative AIC weight shows extremely strong support for fire status and strong support (> 0.5) for distance to burn edge as covariates of initial occupancy (Table 7). None of the AIC weights supported initial occupancy models with no covariates (i.e., as a random process at a fixed probability). Cumulative weights for covariates of detectability showed strong support for season (Table 7). There was very little support (~ 0.1) for models with detectability as a random process at a fixed probability. The top model selected (AIC weight = 0.08, AIC = 2376.7) for gray foxes, and subsequently used for colonization and extinction models, retained season as a covariate for detectability and fire status and distance to burn edge as covariates for initial occupancy.

Model averaged predictions showed that the average probability of detection for gray foxes was 0.51, with detectability higher in the dry season than the wet season (Figure 6c). Initial average occupancy probability was 0.57 with a higher probability in burned areas than unburned areas and a weak negative relationship to distance from burn edge (Figure 6a,b).

There were 25 similar candidate models for colonization and extinction within 2 AIC units, representing ~41% of the total model weight. There was no single top model for colonization and extinction (Table 8). Support for tested covariates was widespread for extinction, but many top models included distance to urban edge and distance to burn edge as colonization covariates (Table 8).

Cumulative AIC weight of the tested variables for gray fox colonization and extinction probabilities demonstrate discriminating support. There is strong support (>0.5) for distance to urban edge as a colonization covariate, but no strong support for any extinction covariate (Table 9). There was little support for models that had either colonization (0.11) or extinction (0.21) as a random process at a fixed probability (i.e., models with no covariates).

Model averaged results show low average probabilities of colonization (0.13) (Figure 7), but no significant relationship between fire status (Figure 7a, d), and a weak positive relationship with distances to urban and burn edges (Figure 7 b, c). Local extinction probability was also low (0.08) but higher at burned sites than unburned sites and no significant relationship with time since fire (Figure 7d-e).

Coyote

There were 671 Coyote detections in 112 weeks at 101 sites (Figure 8). 512 candidate model parameterizations of detectability and initial occupancy revealed strong support for 13 similar models (within 2 AIC units of each other) that made up 43% of the total model weight. There was no single top model for detectability and initial occupancy, but many top models included distance to urban edge as an initial occupancy covariate and all models included season as a detectability covariate (Table 10).

Cumulative AIC weight showed strong support (> 0.5) for distance to urban edge as a covariate of initial occupancy (Table 11). There was weak support (0.2) for models with no covariates for initial occupancy (i.e., as a random process at a fixed probability). Cumulative weights for covariates of detectability showed very strong support for season (Table 11). There was very little support (~ 0.01) for models with detectability as a random process at a fixed probability. The top model selected (AIC weight = 0.06, AIC = 1469.1) for coyotes, and subsequently used for colonization and extinction models, retained season as a covariate for detectability and no covariates for initial occupancy.

Model averaged predictions showed that the average probability of detection for coyotes was 0.40, with detectability higher in the wet season than the dry season (Figure 9c). Initial average occupancy probability was 0.31 with no significant difference between burned areas and unburned areas, but a moderate negative relationship with the urban edge (Figure 9a-b).

There were 24 similar candidate models for colonization and extinction within 2 AIC units, representing ~46% of the total model weight. There was no single top model for colonization and extinction and support for tested covariates was more ambiguous (Table 12). Most top models included distance to burn edge as a colonization covariate and fire status as an extinction covariate (Table 12).

Cumulative AIC weight revealed no strong support for any of the tested covariates of coyote colonization and strong support for fire status and season as extinction covariates (Table 13). There was little support for models that had either colonization (0.26) or extinction (0.09) as a random process at a fixed probability (i.e., models with no covariates).

Model averaged results showed low average probabilities of colonization (0.06) and local extinction (0.05), with little difference in probability of colonization between fire status or season (Figure 10 a,c). Probability of coyote extinction was higher at burned sites than unburned sites and higher during the wet season than the dry (Figure 8c,e).

Bobcat

There were 660 bobcat detections in 112 weeks at 126 sites (Figure 11). Candidate model parameterizations of detectability and initial occupancy revealed strong support for 1 model that made up 89% of the total model weight. This model included fire status as an initial occupancy covariate and vegetation, fire status, season, and day of year as detectability covariates (Table 10).

Cumulative AIC weight shows strong support (> 0.5) for fire status as a covariate of initial occupancy (Table 15). There was very little support (< 0.01) for models with no covariates for initial occupancy. Cumulative weights for covariates of detectability showed very support for vegetation, day of year, and season and strong support for fire status (Table 15). There was very little support (< 0.01) for models with detectability as a random process at a fixed probability. The top model selected (AIC weight = 0.89, AIC = 1560.156) for bobcats, and subsequently used for colonization and extinction models, retained vegetation, fire status, day of year, and season as covariates for detectability and fire status as a covariate for initial occupancy.

Model averaged predictions showed that the average probability of detection for bobcats was 0.15, with detectability higher in riparian than shrubland or grassland (Figure 12). Average probability of initial occupancy was 0.55, slightly higher in burned areas than unburned areas, and strongly and positively related with distance to urban edge (Figure 12a-b).

There were three similar top models for colonization and extinction within 2 AIC units, which represented $\sim 17\%$ of the total model weight (Table 16). There was no top model for colonization and extinction but all top models included fire status, distance to urban edge, and fire age as colonization covariates and fire age as an extinction covariate (Table 16).

Cumulative AIC weight of the tested variables revealed strong support for vegetation, distance to burn edge, fire status, and fire age as covariates of bobcat colonization and strong support for vegetation and fire age as extinction covariates (Table 17). There was little support for models

that had either colonization (< 0.01) or extinction (0.02) as a random process at a fixed probability (i.e., models with no covariates).

Model averaged results showed low average probabilities of colonization (<0.01) and local extinction (0.03) (Figure 13). Probability of bobcat colonization and extinction showed no significant relationship with any of the tested variables (Figure 13).

Striped skunk

There were 693 striped skunk detections in 112 weeks at 135 sites (Figure 14). Candidate model parameterizations of detectability and initial occupancy revealed strong support for 5 models that made up 49% of the total model weight. There was no clear trend among the top models for initial occupancy covariates, but all top models included vegetation and season as detectability covariates (Table 18).

Cumulative AIC weight showed moderate support for distance to urban edge as a covariate of initial occupancy and weak support for models with no covariates for initial occupancy (0.39) (Table 19). Cumulative weights for covariates of detectability showed strong support for vegetation, fire age, and season (Table 19). There was very little support (< 0.01) for models with detectability as a random process at a fixed probability. The top model selected (AIC weight = 0.15, AIC = 1543.0) for striped skunks, and subsequently used for colonization and extinction models, retained vegetation, fire age, and season as covariates for detectability and no covariates for initial occupancy.

Model averaged predictions showed that the average probability of detection for striped skunks was 0.14, with detectability higher in shrubland than riparian or grassland and higher during wet season than the dry season (Figure 15). Average probability of initial occupancy 0.64 with a slightly higher probability in unburned areas than burned areas and a strong negative relationship to urban edge (Figure 15 a-b).

There were 4 similar candidate models for colonization and extinction within 2 AIC units, representing ~24% of the total model weight. There was no single top model for colonization and extinction, but all top models included fire status as a colonization covariate and season as an extinction covariate (Table 20).

Cumulative AIC weight of the tested variables revealed strong support (> 0.5) for distance to burn edge and fire status as covariates of striped skunk colonization (Table 21). There was strong support for distance to urban edge, fire age, and season as covariates of local extinction (Table 21). There was little support for models that had either colonization (0.01) or extinction (0.02) as a random process at a fixed probability (i.e., models with no covariates).

Model averaging shows an average probability of striped skunk colonization of 0.94 and a very low probability of local extinction (< 0.01). There were no significant relationships with any of the tested covariates for probability of colonization or extinction (Figure 16).

Mountain lion

There were 59 mountain lion detections in 112 weeks at 36 sites (Figure 17). Candidate model parameterizations of detectability and initial occupancy revealed similar support for 17 models that made up 51% of the total model weight. There was no single top model for detectability and initial occupancy, but all top models included vegetation type and many included fire status as a detectability covariate (Table 22). Many initial occupancy models included the distance to urban edge covariate (Table 22).

Cumulative AIC weight shows that of the tested variables only distance to urban edge had strong support as a covariate of initial occupancy (Table 23). 24% of AIC weight supported initial occupancy models with no covariates (i.e., a random process with a fixed probability).

Cumulative weights for covariates of detectability showed very support for vegetation and strong support for fire status (Table 23). There was very little support (< 0.01) for models with detectability as a random process at a fixed probability. The top model selected (AIC weight = 0.05, AIC = 207.8), and subsequently used for colonization and extinction models, retained vegetation and day of the year as covariates for detectability and no covariates for initial occupancy.

Model averaging showed that the average probability of mountain lion detection was very low (< 0.01), with no significant difference in detectability between unburned sites and burned sites (Figure 18c). Initial average occupancy probability was also low (0.22) with slightly higher probability at unburned than burned sites (Figure 18a), and a weak negative relationship with distance to urban edge (Figure 18b).

There were 5 similar candidate models for colonization and extinction within 2 AIC units, representing 75% of the total model weight. There was no single top model for colonization and extinction and no clear trend among covariates for colonization. Most of the top models included fire status or distance to burn edge as covariates for extinction (Table 24).

Cumulative AIC weight of the tested variables did not show strong support for any covariates of mountain lion colonization (Table 25). There was strong support for distance to urban edge and fire status as covariates of local extinction (Table 25). There was little support for models that had either colonization (0.28) or extinction (0) as a random process at a fixed probability (i.e., models with no covariates).

Model averaged results show very low average probabilities (0.04) of colonization and local extinction (< 0.01), with probability of colonization higher in burned sites than unburned sites (Figure 19a). There was no significant relationship with any of the tested variables for puma local extinction.

Opossum

There were 71 opossum detections in 112 weeks at 18 sites (Figure 20). Candidate model parameterizations of detectability and initial occupancy resulted in one top model that included vegetation, fire status, and fire age as detectability covariates and distance to burn edge as an initial occupancy covariate (Table 26).

Cumulative AIC weight shows that of the tested variables, only distance to burn edge had strong support as a covariate of initial occupancy (Table 27). Cumulative weights for covariates of detectability showed very strong support support for vegetation, fire status, and fire age (Table 27). There was very little support (< 0.01) for models with initial occupancy of detectability as a random process at a fixed probability. The top model selected (AIC weight = 1.00, AIC = 235.3), and subsequently used for colonization and extinction models, retained vegetation, fire status, and fire age as covariates for detectability and distance to burn edge as a covariate for initial occupancy.

Model averaging showed that the average probability of opossum detection was very low (0.10), with higher detectability at unburned sites than burned sites, and in shrubland than grassland or riparian sites (Figure 21c-d). There was also a strong negative relationship between detection and fire age (Figure 21e). Initial average occupancy probability was also low (0.09) but higher at unburned than burned sites (Figure 21a), and slightly higher closer to the burn perimeter (Figure 21b).

There were 4 similar candidate models for colonization and extinction within 2 AIC units, representing 53% of the total model weight. There was no single top model for colonization and extinction but almost all top models had fire age and distance to burn edge as covariates for opossum local extinction (Table 28).

Cumulative AIC weight of the tested variables revealed moderate support for distance to burn edge and fire age as covariates of opossum colonization (Table 29). There was strong support for

distance to burn edge and fire age as covariates of local extinction (Table 29) and little support for models that had colonization (0.22) or extinction (0.01) as a random process at a fixed probability (i.e., models with no covariates).

Model averaged results show very low average probabilities (< 0.01) of opossum colonization and local extinction (Figure 22). Probability of colonization and probability of extinction were not significantly affected by any of the investigated covariates (Figure 22).

Discussion

Variation in occupancy has been quantified for many systems, but we know relatively little about how species colonize and live in habitats affected by both wildfire and urbanization. We found that fire can have important and varying impacts on wildlife in the time period following fire. Five of the seven analyzed species show either a positive or negative response to fire and six of seven species show some response to urbanization. These results provide novel evidence that this variation may be relevant for postfire biodiversity.

Mule deer

We predicted mule deer would be more likely to initially occupy burned sites associated with the flush of new vegetative growth. However, initial occupancy (i.e., the primary survey period that constitutes 40 weeks to 54 weeks post fire) did not show any significant differences between burned and unburned sites. Average colonization and extinction probabilities were generally low, but higher at unburned sites than at burned sites (Figure 4b,e). Colonization and extinction

dynamics suggests that generally turnover was higher in unburned areas than burned areas. However, since probabilities of extinction and colonization were low, sites that were initially occupied largely remained occupied and those that were unoccupied tended to remain unoccupied. These trends might be explained by population density and the concept of site fidelity. In white-tailed deer, Cherry et al. (2018) found that the magnet effect (see below) was potentially reduced by site fidelity. Deer that only had part of their home ranges burned used both their unburned home range and burned areas, expanding their space use. Deer that had their whole home range burned, though limited in sample size, reduced their space use, and opted for a smaller range with high quality forage of a burned area (Cherry et al. 2018). Lesage et al (2000) also found that higher density populations were more philopatric than those at lower density and more philopatric during the summer than winter. It is possible that mule deer did take advantage of new growth in burned areas (i.e., the ‘magnet effect’ (Archibald et al. 2005)), but this population is also highly philopatric, and did so while not completely abandoning the unburned sites they usually used. The initial occupancy period also took place in summer months, when philopatry effects could have been stronger. In addition, Morrison et al (2021) noted that mule deer site fidelity was stronger in more spatially heterogeneous landscapes. Our study area is also heterogeneous with a mix of open space fragments, burned areas, and urban areas. It is possible that the landscape’s heterogeneity or population density have a stronger influence than fire on mule deer occurrence. This study is also limited in that our earliest survey was 40 weeks post fire, so it is possible that we did not capture any differences that existed between occupancy in burned and unburned sites immediately following the fire.

Gray fox

Since gray foxes are considered a generalist species and prefer dense habitats (Hockman and Chapman 1983), it is possible that they would be relatively unaffected by fire since they can exploit several types of food resources or negatively affected by the loss of cover as they would become more vulnerable to predation. We predicted a positive relationship with distance to urban edge and a positive relationship with time since fire for gray fox occupancy.

However, our results contradicted our predictions and showed that during the first primary period (40 - 54 weeks post fire) gray foxes were more likely to be found in burned areas than unburned areas (Figure 6a), there was no significant relationship with distance to the urban edge, and a weak negative relationship with the burn edge (Figure 6b). There was no significant difference in probability of gray fox colonization between burned and unburned sites (Figure 7a), but there was a weak positive relationship with distances to the urban and burn edges (Figure 7b-c). Probability of gray fox local extinction was higher in burned areas than unburned areas .

Since gray foxes were more likely to occur in burned areas initially (Figure 6a), this suggests there is an opportunity they can exploit in the first primary period. It is possible gray foxes were able to take shelter within burned areas or that their prey (e.g., rodents or rabbits) was more exposed in burned areas offering higher hunting success. These results are consistent with Schuette et al. (2014), who studied carnivore occupancy patterns following wildfire, and also suggested that this pattern could also be due to a high prey growth rate and abundance post-fire (Diffendorfer et al 2012). In the following primary periods (2-8), colonization was about equally likely at burned and unburned sites and gray foxes are more likely to go locally extinct in burned

areas (Figure 7a,d). This dynamic suggests that extinction after 54 weeks post-fire (i.e., primary periods 2-8) strongly influences gray fox distribution (Figure 7d). It could be that as vegetation recovers, prey are not as exposed, or that other large carnivores such as coyotes and bobcats are returning to these areas, and therefore the advantages of exposed prey and higher hunting success dissipates.

Coyote

Coyotes are also considered a behaviorally plastic, generalist species (Kamler & Gipson 2000, Grinder & Krausman 2001), so we predicted a negative correlation between distance to urban edge and occurrence, little to no correlation with fire status, and a positive relationship with time since fire. Our results are mostly consistent with these predictions. There was no difference in probability of initial occupancy at burned and unburned sites (Figure 9a) but there was a negative relationship with distance to the urban edge (Figure 9b). As expected, because of coyotes' ability to exploit several kinds of food sources, occurrence is not influenced by the burn and they do show some preference initially for sites closer to urbanization.

Colonization was not strongly influenced by any of the investigated covariates (Figure 10). Mean local extinction probability was slightly higher in burned and unburned areas and during the wet season than the dry season (Figure 10d,f). Local extinction, in the weeks after 54 weeks post-fire, strongly influenced coyote distribution. The breeding and denning season occurs during the wet season, so this pattern could be attributed to coyotes temporarily abandoning some sites in their home range and allocating energy to denning and rearing pups rather than movement and territory defense (Bekoff and Wells 1980, Feldhammer et al. 2003). Generally, probabilities of

local colonization and extinction were very low (Figure 10), suggesting that there was relatively little movement or turnover and that coyotes use a wide range of sites.

Bobcat

We predicted that bobcats would generally avoid urban areas and occur less frequently in burned areas. Initial occupancy results show that bobcats were slightly more likely to occur in burned vs. unburned sites (Figure 12a) and that they tend to avoid urbanization (Figure 12b). Perhaps, like gray foxes, bobcats are able to take advantage of an increased hunting opportunities post-fire. No significant relationship with any of the tested variables for bobcat local extinction or colonization (Figure 13) combined with very low local colonization and extinction rates suggests that generally there is little movement or turnover at burned sites and that these processes do not strongly influence bobcat distribution.

Striped skunk

Striped skunks are also habitat and foraging generalists, so we predicted we predicted a negative relationship with distance to urban edge and lower probability in burned areas than unburned areas (Ng et al. 2004). The results reveal that striped skunk initial occupancy was slightly higher in unburned areas but there was a weak preference for sites closer to the urban edge (Figure 15 a,b). There were no significant relationships between striped skunk local colonization and extinction and any of the tested covariates (Figure 16). This could either be attributed to a foraging generalist's behavior or that none of the tested variables influence colonization and

extinction dynamics. Neither colonization nor extinction significantly influence striped skunk distribution.

Mountain lion

We predicted that mountain lions would generally avoid sites closer to urban areas, opportunistically used burned areas based on deer presence, and recover with increasing time since fire. Initial occupancy of mountain lions was slightly higher at unburned sites than burned sites but there was a weak preference for sites closer to the urban edge (Figure 17a,b), counter to our predictions. Perhaps when there is a large fire, pumas opt for the dense cover of unburned patches regardless of proximity to urban areas. Probability of colonization was slightly higher at burned sites (Figure 18a) but there was no significant relationship with time since fire.

Probability of extinction also did not have a significant relationship with any of the tested covariates (Figure 18b), and so does not appear to influence mountain lion distribution. Although the probability of colonization was low, after 54 weeks post-fire, it was a strong influence on mountain lion distribution.

Opossum

Since opossums are a generalist species (Boydston 2004), we expected they would prefer areas closer to the urban edge and would be relatively unaffected by fire (Jorge et al. 2020). We found that during the first primary period, it was more likely they would occur in unburned areas than burned areas, but that they were not significantly affected by the urban edge (Figure 21). Perhaps all unburned areas provide more or equal foraging opportunities regardless of proximity to urban

areas. Local colonization and extinction probabilities were extremely low, and not affected by any of the investigated covariates, except for a weak relationship between colonization and distance to the urban edge (Figure 22). Extinction does not appear to strongly influence opossum distribution, but it is possible that opossums are slightly more likely to colonize sites farther from urbanization, possibly because they do not compete as well with other species that use sites closer to urbanization, such as raccoons.

General conclusions

Taken together, our results show that mammal species of the Santa Monica Mountains and Simi Hills respond widely to fire and urbanization. For some species, there is evidence of model overfitting, so results for bobcats, striped skunks, mountain lions, and opossums should be interpreted prudently. While the initial occurrence of some species was lower in burned areas, between 40 to 54 weeks post fire, such as striped skunks, mountain lions and opossums, others were more likely to occur in burned areas, like bobcats and gray foxes. Mule deer and coyotes showed no preference as they were equally likely to occur at burned or unburned sites during this period.

In the following survey periods, 55 weeks post-fire and after, distribution of four species was affected by colonization and extinction processes. Fire status was weakly associated with colonization rates of mule deer and mountain lions, which suggests that the process of colonization affects their distribution. In gray foxes and coyotes, fire status also served as a weak driver on the probability of extinction, and thus local extinction rates influenced their distribution on the landscape. However, for bobcats, skunks and opossums, in which the probability of these

dynamic processes was not influenced by any of the investigated covariates, local colonization and extinction processes did not significantly affect their distributions.

The occurrence of some species was positively associated with urbanization. In the initial survey period, bobcats were more likely to occur farther from urbanization, while coyotes, mountain lions, and striped skunks were more likely to occur closer to urbanization. In the following primary survey periods, gray foxes and opossums were more likely to colonize sites farther from the urban edge. Although the strength of the effect varies, this suggests that the extensive road network in this study area does seem to affect the occurrence of all tested species.

Results of this study show that some species occurrence can still be affected by fire, even 54 weeks or more after the burn. Therefore, occupancy of species that were initially negatively affected by fire, skunk, lion, opossum, and those whose distribution depends on colonization or extinction processes that were controlled weakly by fire, like deer, fox, coyotes, should continue to be monitored. As wildfires become more frequent and destructive and urbanized areas continue to expand, species whose occurrence was affected by both fire and urbanization may be even more important than species whose occurrence is only affected by one of these factors. Future researchers are encouraged to confirm these findings with studies comparing distribution before and after fire to gain a more complete understanding of wildlife response to fire in urban areas.

Tables and Figures

Table 1. Camera site locations distributed by vegetation type and burn status. Habitat types are shrubland, riparian, and grassland, where shrubland refers to chaparral and coastal sage scrub communities. Burned refers to areas altered by the Woolsey Fire while Control represents areas that were unaltered by the Woolsey Fire.

Camera location classification			
	Shrubland	Riparian	Grassland
Burned	90	30	15
Control	30	10	5
Total (180)	120	40	20

Table 2. Top Models comparing different combinations of Initial Occupancy and Detectability covariates ($\Delta AIC < 2$) for mule deer. K refers to the number of parameters in the model which includes the full parameterization of colonization and extinction.

Initial Occupancy Covariates	Detectability Covariates	K	AIC	delta	AICwt
-	Vegetation + Fire status	23	2051.9	0.00	0.24
Distance to urban edge	Vegetation + Fire status	24	2053.6	1.61	0.11
-	Vegetation	22	2053.7	1.71	0.10
-	Vegetation + Fire status + Season	24	2053.9	1.99	0.09
-	Vegetation + Fire status + Fire age	24	2053.9	2.00	0.09

Table 3. Cumulative AIC weights comparing individual covariates in models for initial occupancy and detectability probabilities.

Covariate	Initial occupancy relative importance score	Detectability relative importance score
Vegetation	0	0.99
Distance to burn edge	0	-
Distance to urban edge	0.19	-
Fire status	0	0.73
Day of year	-	0.17
Fire age	-	0.25
Season	-	0.26

Table 4. Top Models comparing different combinations of colonization and extinction covariates ($\Delta AIC < 2$) for mule deer. K refers to the number of parameters in the whole model including the top parameterization selected for initial occupancy and detectability.

Colonization Covariates	Extinction Covariates	K	AIC	delta	AICwt
Fire status + season	Fire status	10	2040.3	0.00	< 0.01
Fire status + season	Vegetation + Fire status	12	2040.5	0.22	< 0.01
Vegetation + Fire status + Season	-	11	2040.7	0.48	< 0.01
Vegetation + Fire status + Distance to urban edge + Season	-	12	2040.8	0.55	< 0.01
Vegetation + Season	-	10	2040.8	0.57	< 0.01
Vegetation + Fire status + Distance to urban edge	-	11	2040.8	0.59	< 0.01
Fire status + Fire age + Season + Fire status * Fire age	-	11	2041.0	0.77	< 0.01
Vegetation + Fire status + Season	Fire status	12	2041.0	0.78	< 0.01
Vegetation + Fire status + Distance to urban edge	Vegetation + Season	14	2041.2	0.94	< 0.01
Fires status + Fire age + Season	-	10	2041.3	1.04	< 0.01
Vegetation + Fire status + Distance to urban edge + Season	Fire status	13	2041.3	1.05	< 0.01
Fire status + Distance to urban edge + Season	-	10	2041.3	1.08	< 0.01
Fire status + Distance to urban edge + Season	Fire status	11	2041.4	1.11	< 0.01
Fire status + Season	Distance to urban edge	10	2041.4	1.16	< 0.01
Fire status	-	8	2041.4	1.19	< 0.01
Vegetation + Fire status + Distance to urban edge	Vegetation + Distance to urban edge + Season	15	2041.4	1.19	< 0.01
Vegetation + Distance to urban edge + Season	-	11	2041.5	1.19	< 0.01
Fire status + Fire age + Season	Fire status	11	2041.5	1.26	< 0.01

Vegetation + Fire status + Distance to urban edge	Fire status	12	2041.5	1.27	< 0.01
Fire status + Season	Distance to burn edge	10	2041.5	1.28	< 0.01
Vegetation + Fire status + Distance to urban edge	Vegetation	13	2041.5	1.29	< 0.01
Vegetation + Fire status	-	10	2041.6	1.34	< 0.01
Fire status + Fire age	-	9	2041.6	1.35	< 0.01
Vegetation + Fire status + Distance to urban edge	Season	12	2041.7	1.41	< 0.01
Fire status + Distance to urban edge + Season	Vegetation + Fire status	13	2041.7	1.43	< 0.01
Fire status + Season	Fire status + Distance to urban edge	11	2041.7	1.46	< 0.01
Fire age	-	8	2041.7	1.48	< 0.01
-	-	7	2041.8	1.52	< 0.01
Fire status	Fire status	9	2041.8	1.56	< 0.01
Vegetation	-	9	2042.0	1.72	< 0.01
Vegetation + Fire status + Season	Distance to burn edge	12	2042.0	1.73	< 0.01
Vegetation + Fire status + Season	Distance to urban edge	12	2042.0	1.75	< 0.01
Vegetation + Fire status	Fire status	11	2042.0	1.76	< 0.01
Fire status + Fire age + Season	Vegetation + Fire status	13	2042.1	1.80	< 0.01
Vegetation + Fire status + Distance to urban edge + Season	Vegetation	14	2042.1	1.81	< 0.01
Vegetation + Distance to urban edge	-	10	2042.1	1.82	< 0.01
Fire status + Fire age	Fire status	10	2042.1	1.82	< 0.01
Vegetation + Fire status + Distance to urban edge + Fire age	-	12	2042.1	1.84	< 0.01

Vegetation + Fire status + Distance to urban edge + Season	Distance to burn edge	13	2042.1	1.84	< 0.01
Vegetation + Fire status + Distance to urban edge	Distance to burn edge	12	2042.1	1.85	< 0.01
Vegetation + Fire status + Distance to urban edge	Vegetation + Distance to urban edge	14	2042.1	1.86	< 0.01
Vegetation + Fire status + Fire age + Season	-	12	2042.2	1.89	< 0.01
Vegetation + Fire age + Season	-	11	2042.2	1.90	< 0.01
Vegetation + Fire status + Fire age + Fire status * Fire age	-	12	2042.2	1.91	< 0.01
Vegetation + Fire status + Fire age + Season + Fire status * Fire age	-	13	2042.2	1.92	< 0.01
Fire status	Distance to urban edge	9	2042.2	1.93	< 0.01
Fire status + Season	Vegetation + Fire status + Distance to burn edge	13	2042.2	1.96	< 0.01
Vegetation + Fire status + Fire age	-	11	2042.2	1.97	< 0.01
Fire status + Fire age + Season + Fire status * Fire age	Fire status	12	2042.2	1.98	<0.01
Fire status + Season	Vegetation	11	2042.3	2.00	<0.01

Table 5. Cumulative AIC weight support for individual covariates in compared models for mule deer colonization and extinction probabilities.

Covariate	Colonization relative importance score	Extinction relative importance score
Vegetation	0.57	0.29
Distance to burn edge	0.16	0.26
Distance to urban edge	0.41	0.26
Fire status	0.77	0.29
Fire age	0.53	0.16
Fire status * Fire age	0.17	<0.01
Season	0.37	0.30

Table 6. Top Models comparing different combinations of initial occupancy and detectability covariates ($\Delta AIC < 2$) for gray fox. K refers to the number of parameters in the whole model including the full parameterization of colonization and extinction.

Initial Occupancy Covariates	Detectability Covariates	K	AIC	delta	AICwt
Fire status + Distance to burn edge	Season	23	2376.7	0.00	0.08
Fire status	Season	22	2377.3	0.62	0.06
Fire status	Fire status + Season	23	2377.9	1.20	0.04
Fire status + Distance to burn edge	-	22	2378.2	1.50	0.04
Fire status + Distance to urban edge + Distance to burn edge	Season	24	2378.2	1.57	0.03
Fire status + Distance to burn edge	Fire age + Season	24	2378.3	1.66	0.03

Table 7. Cumulative AIC weights comparing individual covariates in models for initial occupancy and detectability probabilities for Gray Fox.

Covariate	Initial occupancy relative importance score	Detectability relative importance score
Vegetation	0	0.28
Distance to burn edge	0.52	-
Distance to urban edge	0.36	-
Fire status	0.97	0.36
Day of year	-	0.13
Fire age	-	0.30
Season	-	0.65

Table 8. Top Models comparing different combinations of colonization and extinction covariates ($\Delta AIC < 2$) for gray foxes. K refers to the number of parameters in the whole model including the top parameterization selected for initial occupancy and detectability.

Colonization Covariates	Extinction Covariates	K	AIC	delta	AICwt
-	-	7	2364.8	0.00	0.03
Distance to burn edge	-	8	2365.1	0.27	0.03
Distance to urban edge + Distance to burn edge	-	9	2365.2	0.44	0.02
Distance to urban edge	-	8	2365.3	0.47	0.02
-	Fire status	8	2365.7	0.88	0.02

Distance to urban edge	Fire status	9	2365.7	0.89	0.02
-	Distance to burn edge	8	2365.7	0.95	0.02
-	Fire age	8	2365.9	1.13	0.02
Distance to burn edge	Fire age	9	2366.0	1.24	0.02
Distance to urban edge + Distance to burn edge	Fire status	10	2366.0	1.25	0.02
Distance to urban edge + Distance to burn edge	Distance to urban edge	10	2366.2	1.36	0.02
Distance to urban edge	Distance to burn edge	9	2366.2	1.39	0.01
Distance to urban edge	Distance to urban edge	9	2366.2	1.45	0.01
Distance to burn edge	Fire status	9	2366.3	1.47	0.01
Fire status + Distance to urban edge	-	9	2366.3	1.53	0.01
Distance to urban edge + Distance to burn edge	Fire age	10	2366.4	1.57	0.01
Distance to urban edge	Fire status + Distance to urban edge	10	2366.4	1.64	0.01
Fire status	-	8	2366.5	1.66	0.01
Season	-	8	2366.5	1.72	0.01
Distance to urban edge	Fire age	9	2366.5	1.75	0.01
Distance to burn edge	Distance to burn edge	9	2366.6	1.76	0.01
Distance to urban edge + Distance to burn edge	Fire status + Distance to urban edge	11	2366.7	1.91	0.01
Distance to urban edge + Season + Distance to burn edge	-	10	2366.7	1.92	0.01
Season + Distance to burn edge	-	9	2366.7	1.92	0.01
Distance to urban edge + Distance to burn edge	Distance to burn edge	10	2366.7	1.96	0.01

Table 9. Cumulative AIC weight support for individual covariates in compared models for colonization and extinction probabilities of gray foxes.

Covariate	Colonization relative importance score	Extinction relative importance score
Vegetation	0.03	0.02
Distance to burn edge	0.43	0.23
Distance to urban edge	0.67	0.28
Fire status	0.23	0.29
Fire age	0.17	0.38
Fire status * Fire age	0.03	0.01
Season	0.39	<0.01

Table 10. Top Models comparing different combinations of Initial Occupancy and Detectability covariates ($\Delta AIC < 2$) for coyotes. K refers to the number of parameters in the whole model including the full parameterization for colonization and extinction.

Initial Occupancy Covariates	Detectability Covariates	K	AIC	delta	AICwt
-	Season	21	1469.1	0.00	0.06
Distance to urban edge	Season	22	1469.2	0.10	0.05
Distance to burn edge	Season	22	1469.4	0.30	0.05
Distance to urban edge + Distance to burn edge	Season	23	1469.7	0.59	0.04
-	Fire status + Season	22	1470.2	1.14	0.03
Distance to urban edge	Fire status + Season	23	1470.3	1.21	0.03
Distance to urban edge	Fire age + Season	23	1470.4	1.25	0.03
Distance to burn edge	Fire status + Season	23	1470.5	1.35	0.03
Distance to urban edge + Distance to burn edge	Fire status + Season	24	1470.7	1.58	0.03
-	Fire age + Season	22	1470.8	1.67	0.02
Distance to urban edge + Distance to burn edge	Fire age + Season	24	1470.9	1.76	0.02
Fire status + Distance to urban edge	Season	23	1470.9	1.81	0.02

Distance to burn edge	Fire age + Season	23	1471.0	1.94	0.02
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Table 11. Cumulative AIC weights comparing individual covariates in models for initial occupancy and detectability probabilities for coyotes.

Covariate	Initial occupancy relative importance score	Detectability relative importance score
Vegetation	0.08	0.28
Distance to burn edge	0.38	-
Distance to urban edge	0.54	-
Fire status	0.19	0.39
Day of year	-	0.14
Fire age	-	0.34
Season	-	1.00

Table 12. Top Models comparing different combinations of colonization and extinction covariates ($\Delta AIC < 2$) for coyotes. K refers to the number of parameters in the whole model including the top parameterization selected for initial occupancy and detectability.

Colonization Covariates	Extinction Covariates	K	AIC	delta	AICwt
-	Fire age + Season	7	1454.3	0.00	0.03
-	Season	6	1454.8	0.48	0.03
-	Fire status + Fire age + Season	8	1454.9	0.53	0.03
-	-	5	1454.9	0.59	0.03
Distance to burn edge	Fire status + Season	8	1455.0	0.71	0.02
Distance to burn edge	Fire status + Fire age + Season	9	1455.1	0.78	0.02
-	Fire status + Season	7	1455.2	0.82	0.02
-	Fire status	6	1455.5	1.13	0.02
Distance to burn edge	Fire status	7	1455.5	1.16	0.02

Distance to burn edge	Fire age + Season	8	1455.5	1.17	0.02
Season + Distance to burn edge	Fire status + Season	9	1455.5	1.20	0.02
-	Fire status + Fire age + Season + Distance to burn edge	9	1455.6	1.29	0.02
Distance to burn edge	Season	7	1455.8	1.48	0.02
Season	Fire age + Season	8	1455.8	1.50	0.02
Season	Fire status + Season	8	1455.9	1.59	0.02
Season	Season	7	1456.0	1.63	0.02
Season	Fire status + Fire age + Season	10	1456.0	1.64	0.02
Distance to burn edge	-	6	1456.0	1.69	0.01
Vegetation	Vegetation + Fire age + Season	11	1456.0	1.71	0.01
Fire status	Fire age + Season	8	1456.0	1.72	0.01
Season	Fire status + Fire age + Season	9	1456.1	1.72	0.01
Fire status + Distance to burn edge	Fire age + Season	9	1456.1	1.80	0.01
-	Fire status + Season + Distance to burn edge	8	1456.1	1.81	0.01
Distance to burn edge	Fire status + Fire age + Season + Distance to burn edge	10	1456.3	1.97	0.01

Table 13. Cumulative AIC weight support for individual covariates in compared models for colonization and extinction probabilities of coyotes.

Covariate	Colonization relative importance score	Extinction relative importance score
Vegetation	0.06	0.19
Distance to burn edge	0.47	0.22
Distance to urban edge	0	0.08
Fire status	0.16	0.60
Fire age	0.01	0.45
Fire status * Fire age	0	0
Season	0.39	0.65

Table 14. Top model comparing different combinations of initial occupancy and detectability covariates ($\Delta AIC < 2$) for bobcats. K refers to the number of parameters in the whole model including the full parameterization for colonization and extinction.

Initial Occupancy Covariates	Detectability Covariates	K	AIC	delta	AICwt
Fire status	Vegetation + Fire status + Season + day of year	27	1560.2	0.00	0.89

Table 15. Cumulative AIC weights comparing individual covariates in models for initial occupancy and detectability probabilities for bobcats.

Covariate	Initial occupancy relative importance score	Detectability relative importance score
Vegetation	0.11	1.00
Distance to burn edge	< 0.01	-
Distance to urban edge	0.11	-
Fire status	0.89	0.89
Day of year	-	1.00
Fire age	-	< 0.01
Season	-	1.00

Table 16. Top Models comparing different combinations of colonization and extinction covariates ($\Delta AIC < 2$) for bobcats. K refers to the number of parameters in the whole model including the top parameterization selected for initial occupancy and detectability.

Colonization Covariates	Extinction Covariates	K	AIC	delta	AICwt
Vegetation + Fire status + Distance to urban edge + Fire age	Vegetation + Fire status + Fire age + Season + Fire status * Fire age	22	1585.6	0.00	0.08
Vegetation + Fire status + Distance to urban edge + Fire age + Season + Distance to burn edge	Fire age	19	1586.3	0.67	0.06
Fire status + Distance to urban edge + Fire age + Season	Fire status + Fire age + Season	18	1587.2	1.58	0.04

Table 17. Cumulative AIC weight support for individual covariates in compared models for colonization and extinction probabilities of bobcats.

Covariate	Colonization relative importance score	Extinction relative importance score
Vegetation	0.86	0.70
Distance to burn edge	0.56	0.26
Distance to urban edge	0.40	0.39
Fire status	0.80	0.45
Fire age	0.95	0.68
Fire status * Fire age	0.13	0.12
Season	0.48	0.21

Table 18. Top models comparing different combinations of initial occupancy and detectability covariates ($\Delta AIC < 2$) for striped skunks. K refers to the number of parameters in the whole model including the full parameterization for colonization and extinction.

Initial Occupancy Covariates	Detectability Covariates	K	AIC	delta	AICwt
-	Vegetation + Fire age + Season	24	1543.0	0.00	0.15
Distance to urban edge	Vegetation + Fire age + Season	25	1543.1	0.12	0.15
-	Vegetation + Fire status + Fire age + Season	25	1544.7	1.70	0.07
Fire status	Vegetation + Season	24	1544.7	1.70	0.07

Distance to urban edge	Vegetation + Fire status + Fire age + Season	26	1544.9	1.89	0.06
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Table 19. Cumulative AIC weights comparing individual covariates in models for initial occupancy and detectability probabilities for striped skunks.

Covariate	Initial occupancy relative importance score	Detectability relative importance score
Vegetation	0.01	0.91
Distance to burn edge	0.07	-
Distance to urban edge	0.47	-
Fire status	0.16	0.30
Day of year	-	0.12
Fire age	-	0.68
Season	-	0.83

Table 20. Top Models comparing different combinations of colonization and extinction covariates ($\Delta AIC < 2$) for striped skunks. K refers to the number of parameters in the whole model including the top parameterization selected for initial occupancy and detectability.

Colonization Covariates	Extinction Covariates	K	AIC	delta	AICwt
Fire status + Distance to urban edge + Season + Distance to burn edge	Distance to urban edge + Season	14	1541.9	0.00	0.09
Fire status + Fire age + Season + Distance to burn edge	Distance to urban edge + Season	14	1543.0	1.06	0.05
Fire status + Distance to urban edge + Season + Distance to burn edge	Season	13	1543.2	1.29	0.05
Fire status + Distance to urban edge + Fire age + Season + Distance to burn edge	Distance to urban edge + Season	15	1543.6	1.70	0.04

Table 21. Cumulative AIC weight support for individual covariates in compared models for colonization and extinction probabilities of striped skunks.

Covariate	Colonization relative importance score	Extinction relative importance score
Vegetation	0.11	0.47
Distance to burn edge	0.89	0.42

Distance to urban edge	0.50	0.62
Fire status	0.88	0.47
Fire age	0.50	0.55
Fire status * Fire age	0.10	0.14
Season	0.44	0.64

Table 22. Top model comparing different combinations of initial occupancy and detectability covariates ($\Delta AIC < 2$) for mountain lions. K refers to the number of parameters in the whole model including the null parameterization for colonization and extinction.

Initial Occupancy Covariates	Detectability Covariates	K	AIC	delta	AICwt
-	Vegetation + Day of year	8	207.8	0.00	0.05
-	Vegetation + Fire status + Day of year	9	208.0	0.23	0.04
Distance to urban edge + Distance to burn edge	Vegetation + Fire status	9	208.1	0.32	0.04
-	Vegetation + Fire age + Day of year	9	208.1	0.32	0.04
Distance to urban edge	Vegetation + Fire age	8	208.3	0.53	0.04
-	Vegetation + Fire age	7	208.5	0.69	0.03
Distance to urban edge	Vegetation + Fire status	8	208.7	0.94	0.03
Distance to urban edge	Vegetation + Fire status + Fire age	9	208.7	0.95	0.03
Distance to urban edge + Distance to burn edge	Vegetation + Fire status + Fire age	10	208.7	0.96	0.03
-	Vegetation + Fire status + Fire age + Day of year	10	209.1	1.30	0.03
-	Vegetation + Season + Day of year	9	209.2	1.41	0.02
Fire status + Distance to urban edge	Vegetation + Fire status + Day of year	11	209.3	1.54	0.02
-	Vegetation + Fire status	7	209.4	1.58	0.02
-	Vegetation + Fire status + Fire age	8	209.4	1.59	0.02
Fire status + Distance to urban edge + Distance to burn edge	Vegetation + Fire status	10	209.6	1.85	0.02

Distance to urban edge	Vegetation + Season + Day of year	10	209.7	1.93	0.02
Distance to urban edge	Vegetation	7	209.7	1.95	0.02

Table 23. Cumulative AIC weights comparing individual covariates in models for initial occupancy and detectability probabilities for mountain lions.

Covariate	Initial occupancy relative importance score	Detectability relative importance score
Vegetation	0	0.99
Distance to burn edge	0.31	-
Distance to urban edge	0.50	-
Fire status	0.24	0.60
Day of year	-	0.40
Fire age	-	0.47
Season	-	0.35

Table 24. Top Models comparing different combinations of colonization and extinction covariates ($\Delta AIC < 2$) for mountain lions. K refers to the number of parameters in the whole model including the top parameterization selected for initial occupancy and detectability.

Colonization Covariates	Extinction Covariates	K	AIC	delta	AICwt
Fire status + Distance to burn edge	Distance to urban edge	11	203.3	0.00	0.24
-	Fire status + distance to urban edge + Fire age	11	203.8	0.45	0.19
Fire status + Distance to urban edge + Fire age	Fire status + Distance to burn edge	13	204.4	1.05	0.14
-	Distance to burn edge	9	205.3	1.95	0.09
Distance to urban edge + Fire age + Distance to burn edge	Fire status + Distance to burn edge + Fire age	14	205.3	1.97	0.09

Table 25. Cumulative AIC weight support for individual covariates in compared models for colonization and extinction probabilities of mountain lions.

Covariate	Colonization relative importance score	Extinction relative importance score
Vegetation	0	0
Distance to burn edge	0.42	0.37
Distance to urban edge	0.34	0.58
Fire status	0.40	0.57
Fire age	0.43	0.42
Fire status * Fire age	0	0
Season	0	0.04

Table 26. Top model comparing different combinations of initial occupancy and detectability covariates ($\Delta AIC < 2$) for opossums. K refers to the number of parameters in the whole model including the full parameterization for colonization and extinction.

Initial Occupancy Covariates	Detectability Covariates	K	AIC	delta	AICwt
Distance to burn edge	Vegetation + Fire status + Fire age	25	235.3	0.00	1.00

Table 27. Cumulative AIC weights comparing individual covariates in models for initial occupancy and detectability probabilities.

Covariate	Initial occupancy relative importance score	Detectability relative importance score
Vegetation	< 0.01	1.00
Distance to burn edge	1.00	-
Distance to urban edge	< 0.01	-
Fire status	< 0.01	1.00
Day of year	-	< 0.01
Fire age	-	1.00
Season	-	< 0.01

Table 28. Top Models comparing different combinations of colonization and extinction covariates ($\Delta AIC < 2$) for opossums. K refers to the number of parameters in the whole model including the top parameterization selected for initial occupancy and detectability.

Colonization Covariates	Extinction Covariates	K	AIC	delta	AICwt
Distance to urban edge + Fire age	Fire status + Fire age + Distance to burn edge	14	215.0	0.00	0.16
Distance to urban edge + Fire age	Distance to urban edge + Fire age + Distance to burn edge	14	215.1	0.07	0.16
-	Distance to urban edge + Fire age + Distance to burn edge	12	215.5	0.47	0.13
-	Fire age + Distance to burn edge	11	216.5	1.45	0.08

Table 29. Cumulative AIC weight support for individual covariates in compared models for opossum colonization and extinction probabilities.

Covariate	Colonization relative importance score	Extinction relative importance score
Vegetation	0	0.01
Distance to burn edge	0.28	0.95
Distance to urban edge	0.49	0.36
Fire status	0.24	0.29
Fire age	0.42	0.84
Fire status * Fire age	0.02	0.02
Season	< 0.01	< 0.01

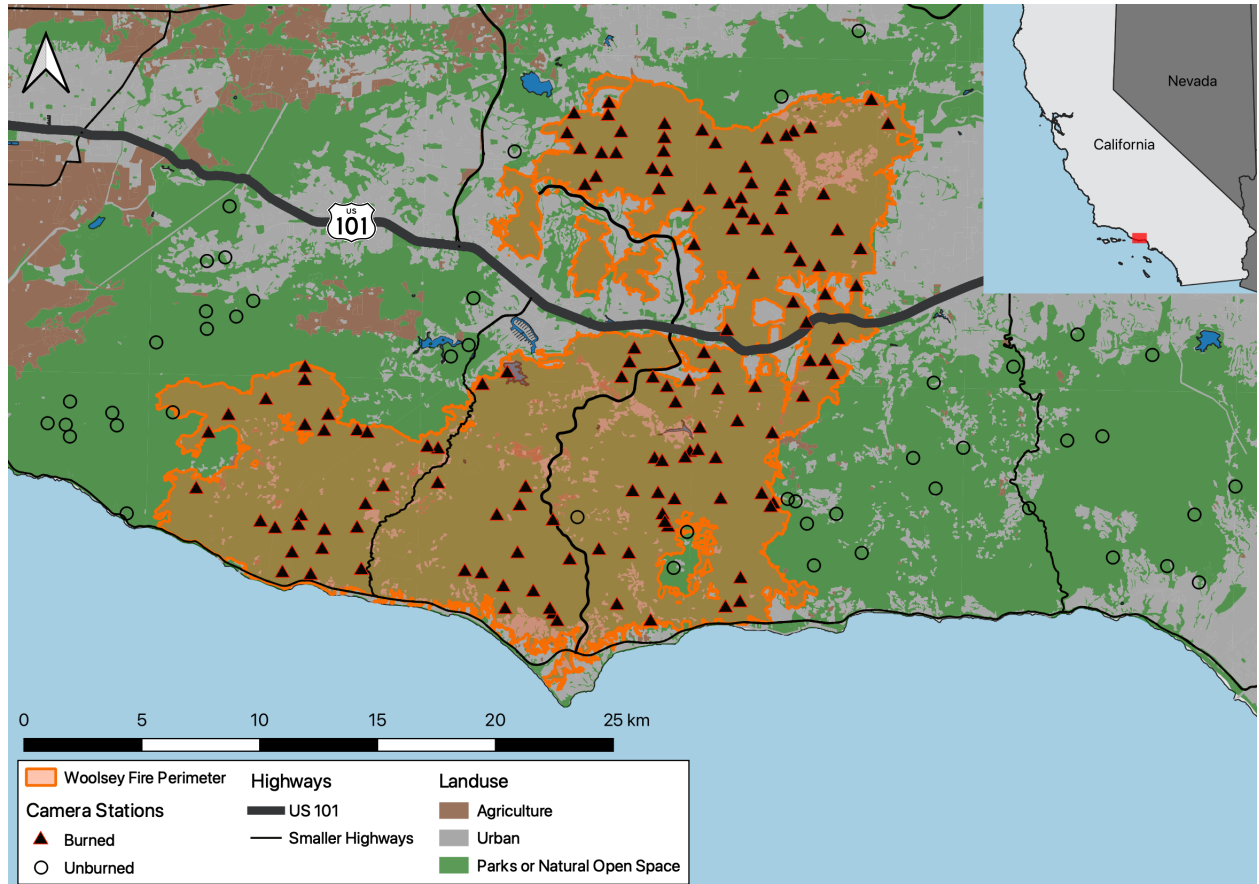


Figure 1. Map of camera site locations in study region in California. Shows sites in context of the area burned in Woolsey Fire, surrounding urban areas, and major highways.

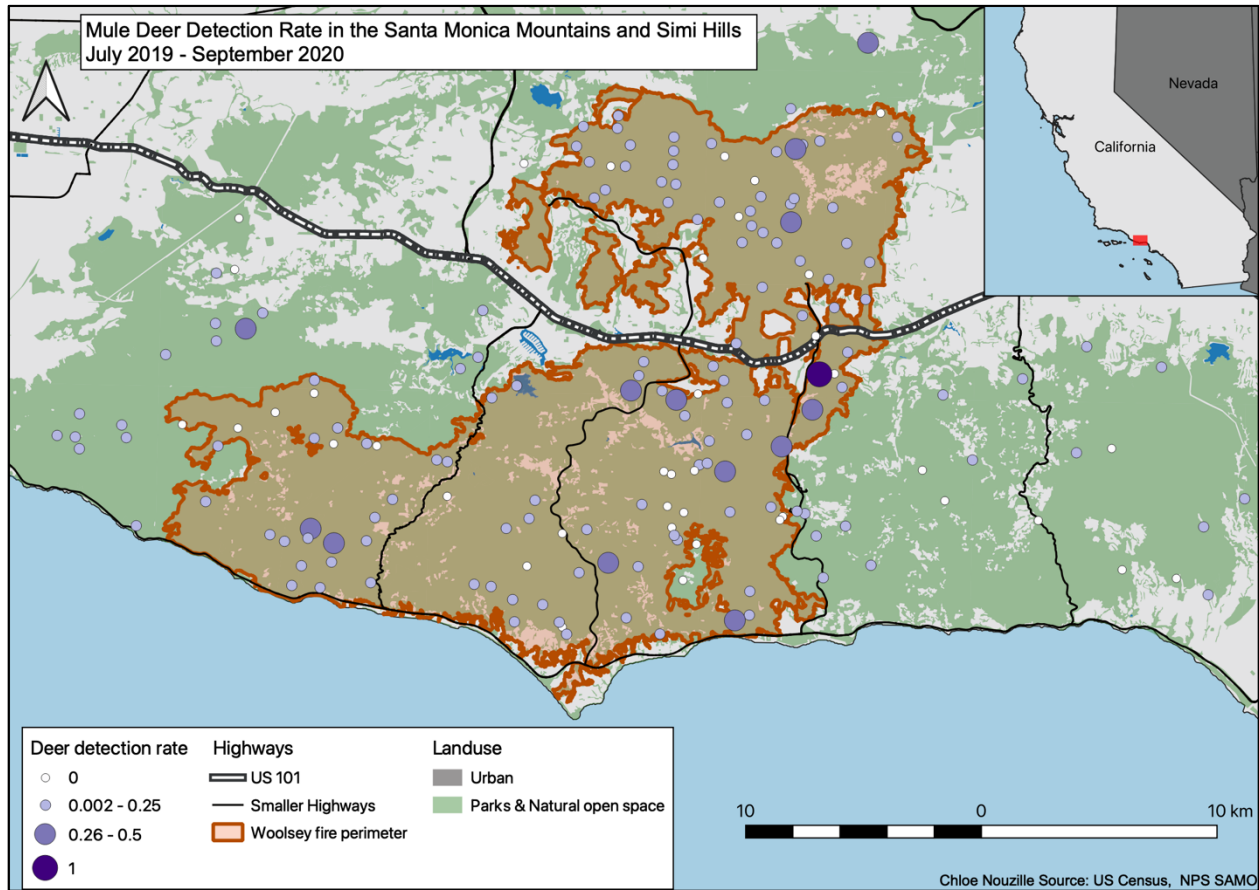


Figure 2. Deer Detection rates by site. Rate is the total number of detections at the site divided by the number of capture nights, i.e., the number of days a camera was at that site and operational. A value of 0.2 indicates less than 1 deer detection occurs per day or an average of 20 deer detections every 100 days.

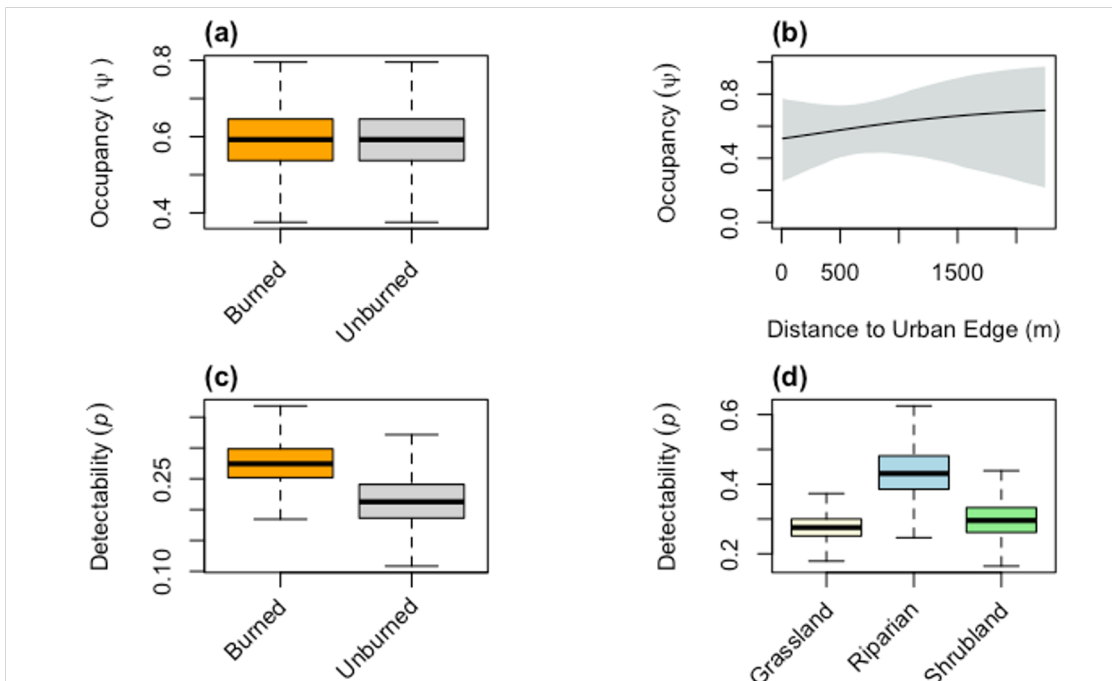


Figure 3. Model-averaged covariate relationships for occupancy (a, b) and detection (c-d) probabilities for mule deer. Mean covariate relationships for continuous variables are depicted by a bold horizontal line and shaded areas indicate 95% confidence intervals. Relationships estimated from parametric bootstrapping of model-averaged covariate and intercept means and standard errors.

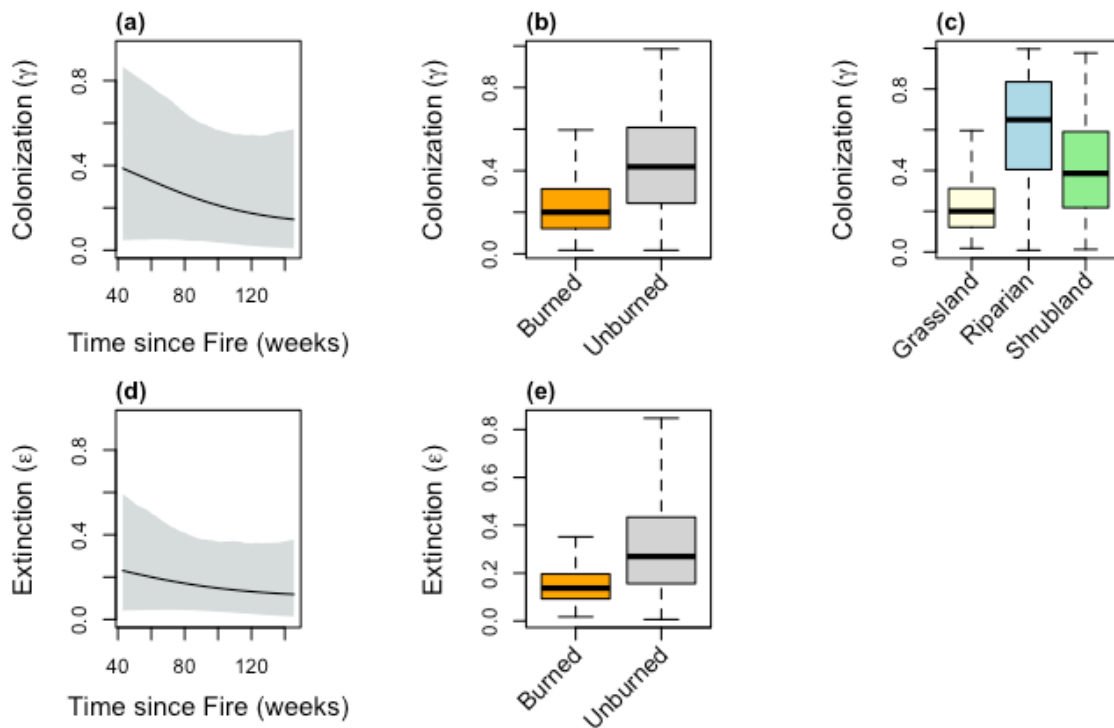


Figure 4. Model-averaged covariate relationships for probabilities of colonization (a-c) and local extinction (d-e) for mule deer. Plots show model-averaged mean covariate relationships (solid black line) and 95% confidence interval for slopes (shaded gray area). Relationships were estimated from parametric bootstrapping of covariate and intercept means and standard errors.

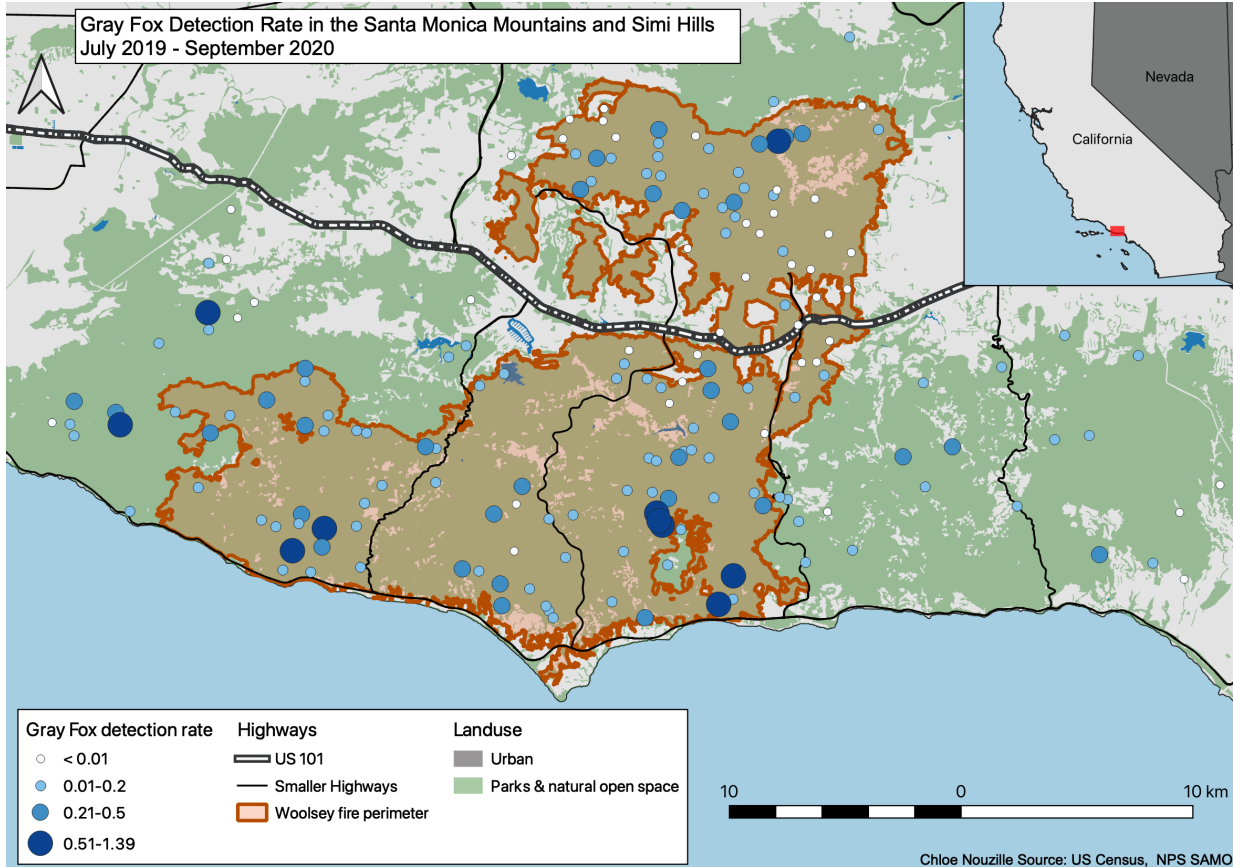


Figure 5. Gray fox detection rates by site within the study region. Detection rate is the total number of detections at the site divided by the number of capture nights, i.e., the number of days a camera was at that site and operational. A value of 0.01 indicates less than 1 fox detection occurs per day or that on average there is 1 fox detection every 100 days.

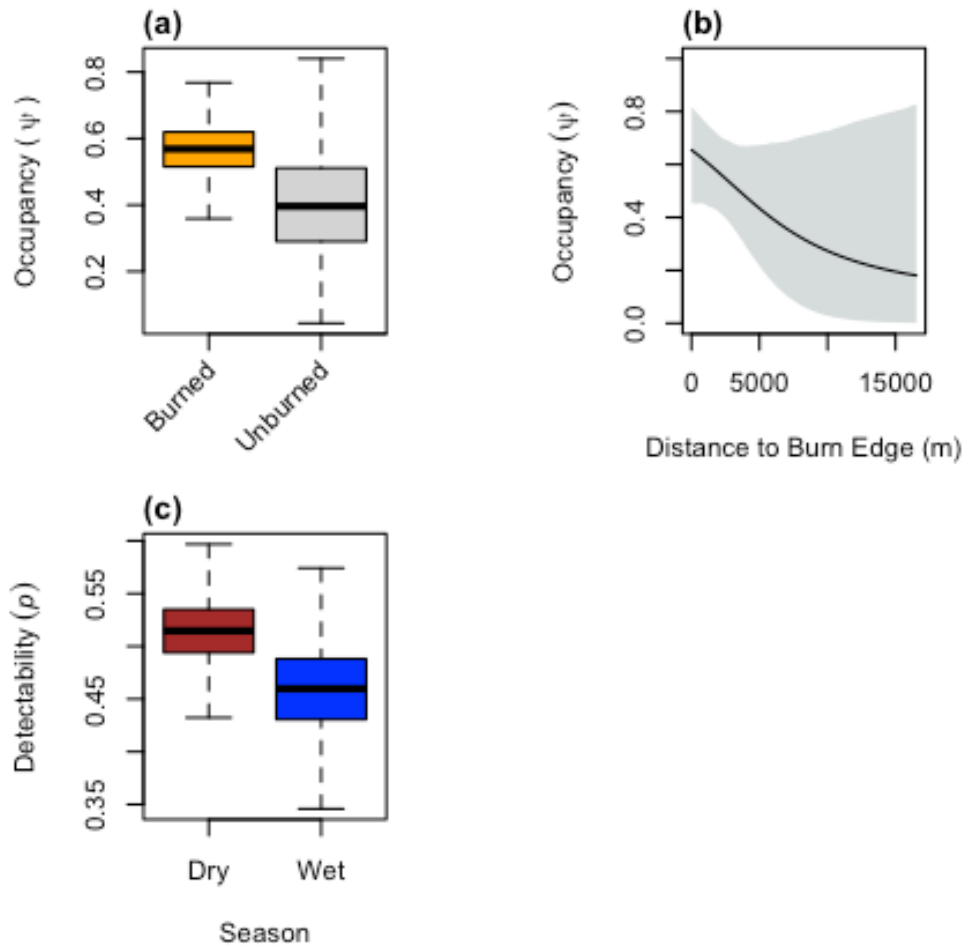


Figure 6. Model-averaged covariate relationships for occupancy (a, b) and detection (c) probabilities for gray foxes. Mean covariate relationships are depicted by a bold horizontal line and shaded areas indicate 95% confidence intervals. Relationships estimated from parametric bootstrapping of model-averaged covariate and intercept means and standard errors.

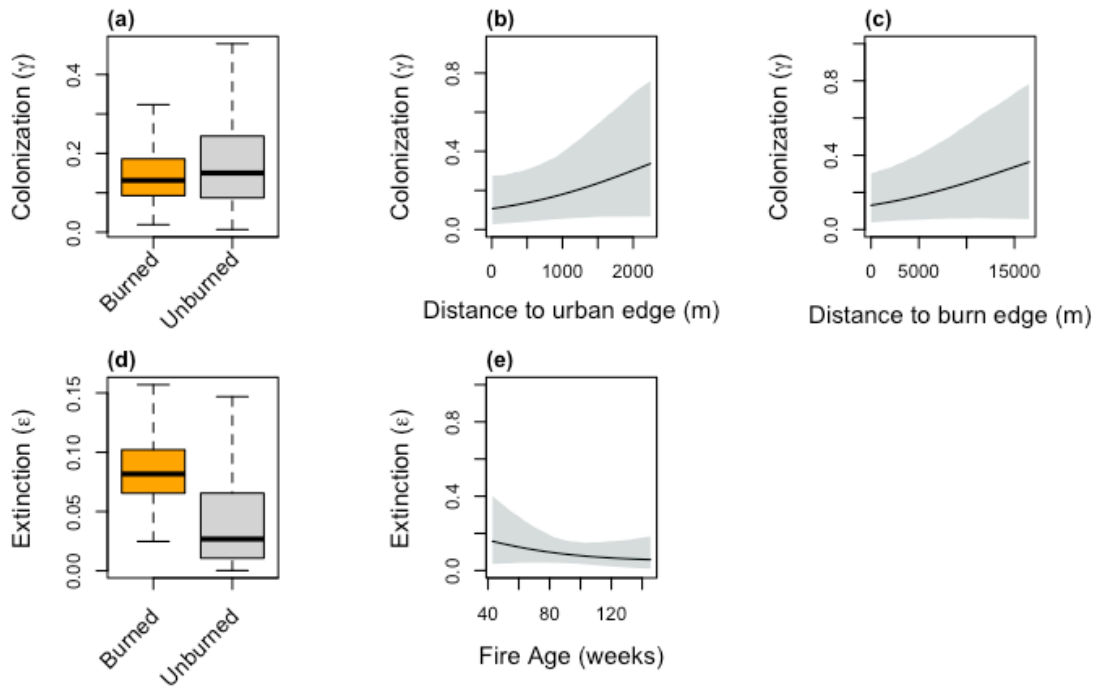


Figure 7. Model-averaged covariate relationships for probabilities of colonization (a-c) and local extinction (d-e) for gray foxes. Plots show model-averaged mean covariate relationships (solid black line) and 95% confidence interval for slopes (shaded grey area). Relationships were estimated from parametric bootstrapping of covariate and intercept means and standard errors.

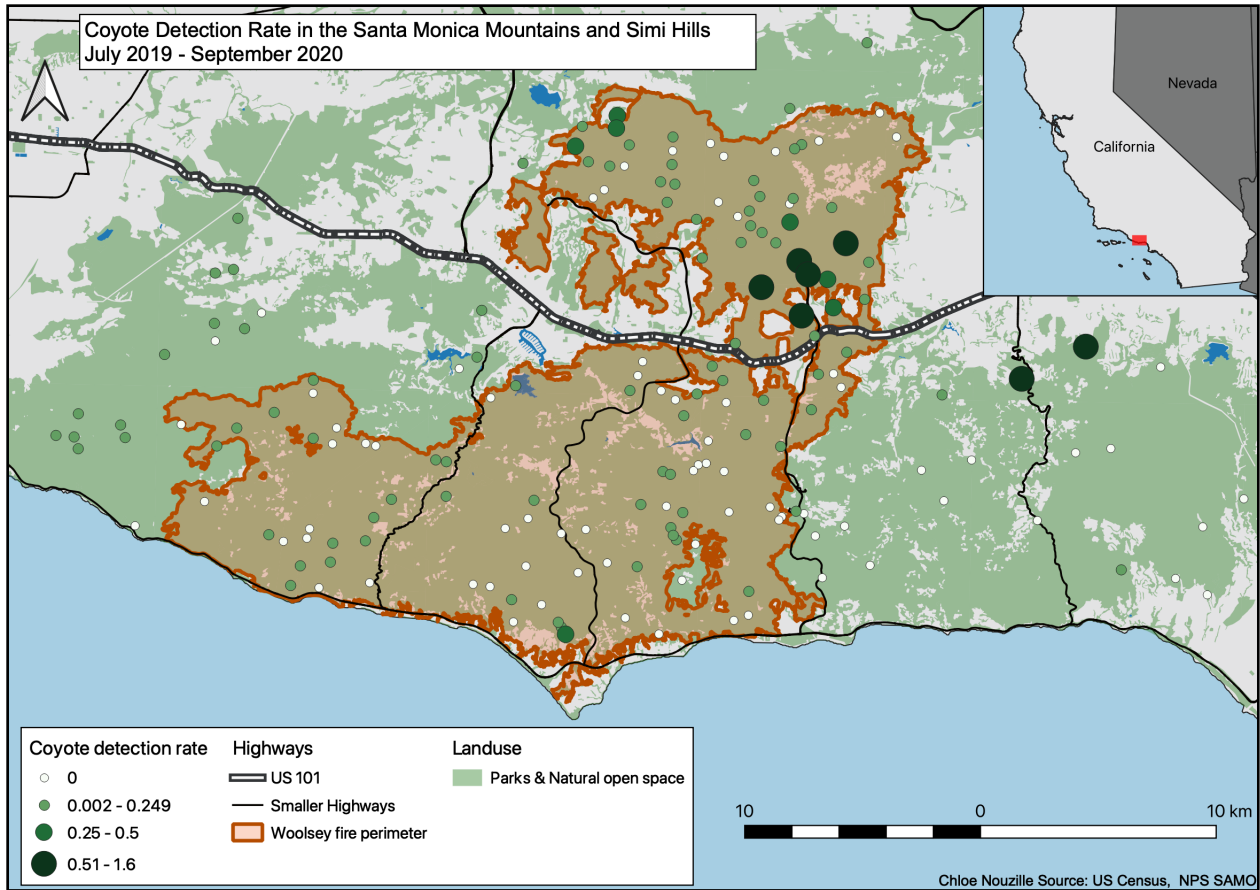


Figure 8. Coyote detection rates by site. Detection rate is the total number of detections at the site divided by the number of capture nights, i.e., the number of days a camera was at that site and operational. A value of 0.01 indicates less than 1 coyote detection occurs per day or that on average there is 1 coyote detection every 100 days.

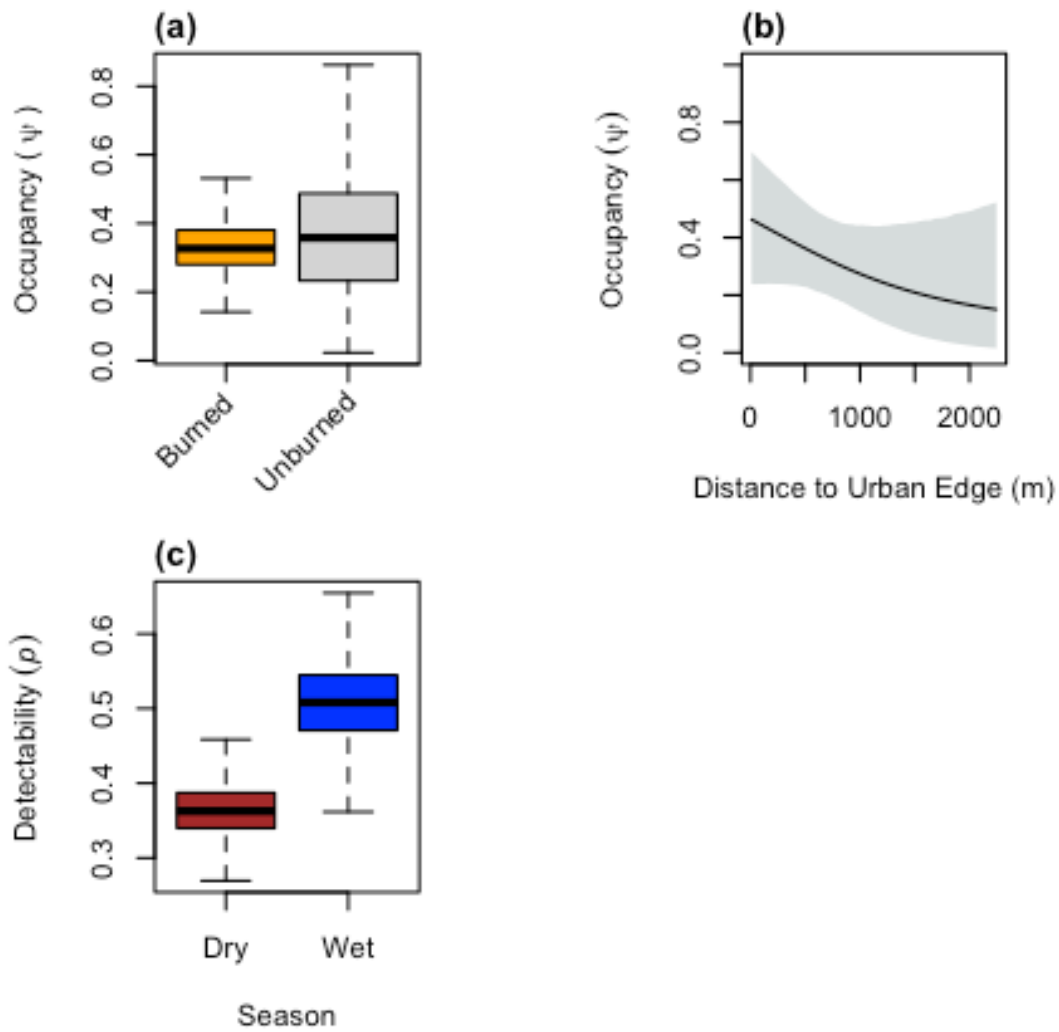


Figure 9. Model-averaged covariate relationships for occupancy (a, b) and detection (c) probabilities for coyotes. Mean covariate relationships are depicted by a bold horizontal line and dotted black lines and shaded areas indicate 95% confidence intervals. Relationships estimated from parametric bootstrapping of model-averaged covariate and intercept means and standard errors.

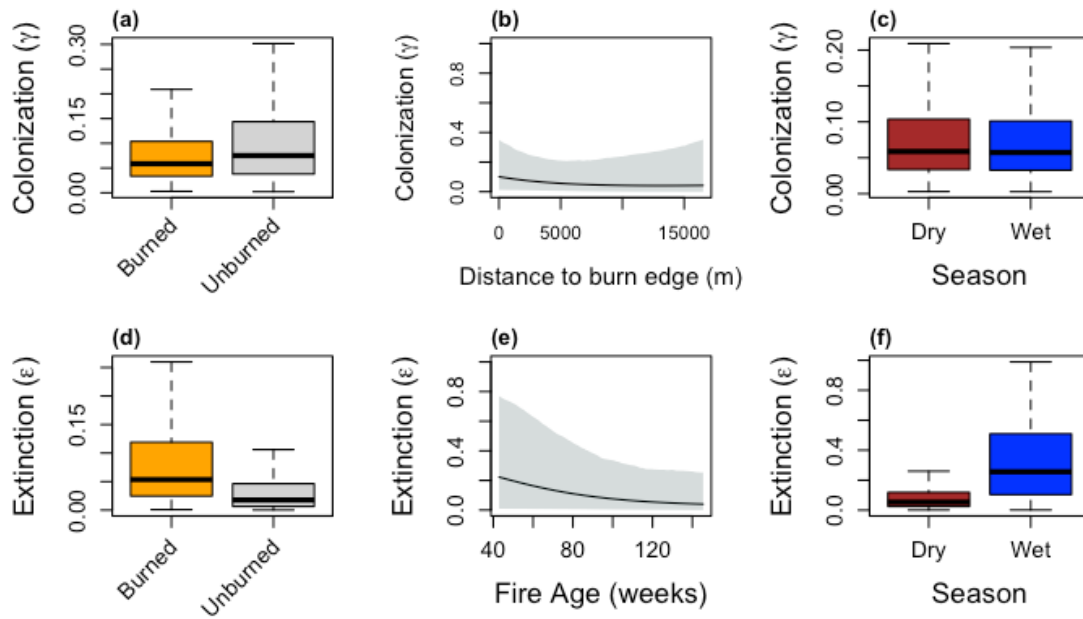


Figure 10. Model-averaged covariate relationships for probabilities of colonization (a-c) and local extinction (d-f) for coyotes. Plots show model-averaged mean covariate relationships (solid black line) and 95% confidence interval for slopes (shaded grey area).

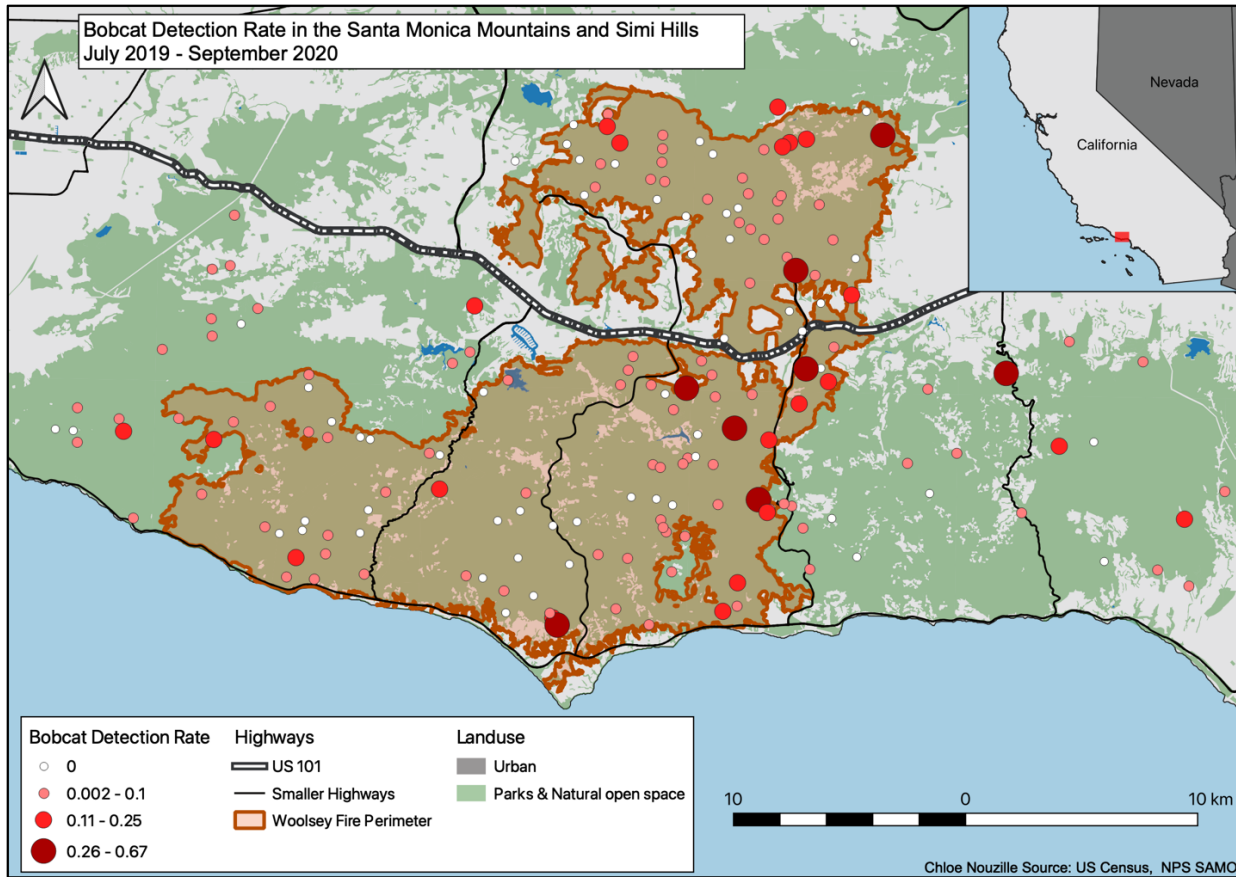


Figure 11. Bobcat detection rates by site. Detection rate is the total number of detections at the site divided by the number of capture nights, i.e., the number of days a camera was at that site and operational. A value of 0.01 indicates less than 1 bobcat detection occurs per day or that on average there is 1 bobcat detection every 100 days.

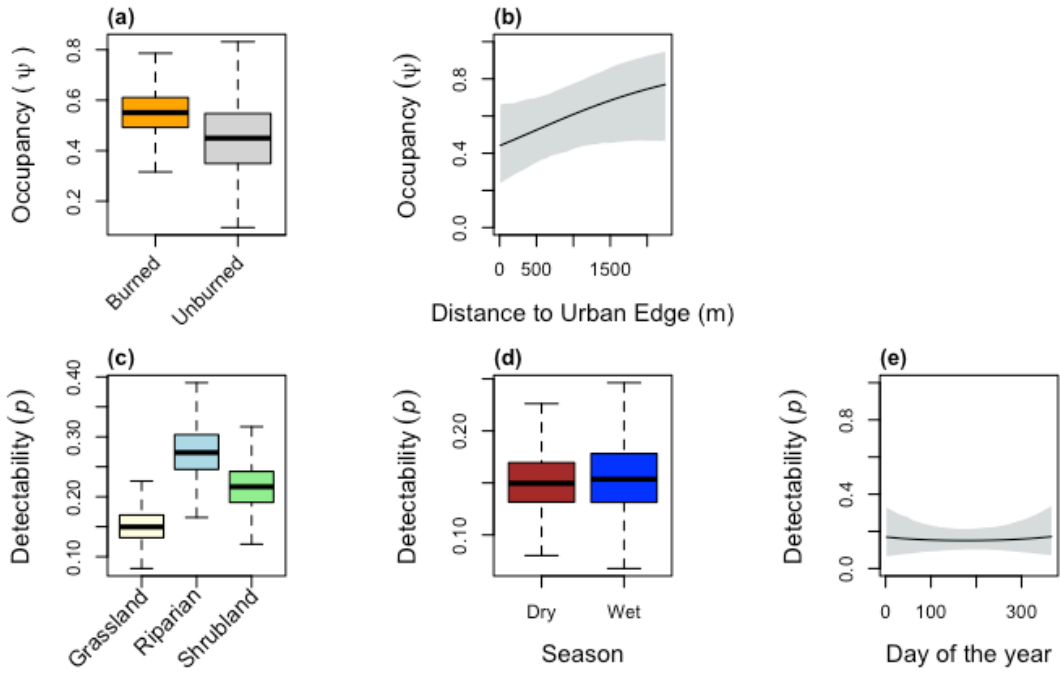


Figure 12. Model-averaged covariate relationships for occupancy (a, b) and detection (c-e) probabilities for bobcats. Mean covariate relationships are depicted by a bold horizontal line and dotted black lines add shaded areas indicate 95% confidence intervals. Relationships estimated from parametric bootstrapping of model-averaged covariate and intercept means and standard errors.

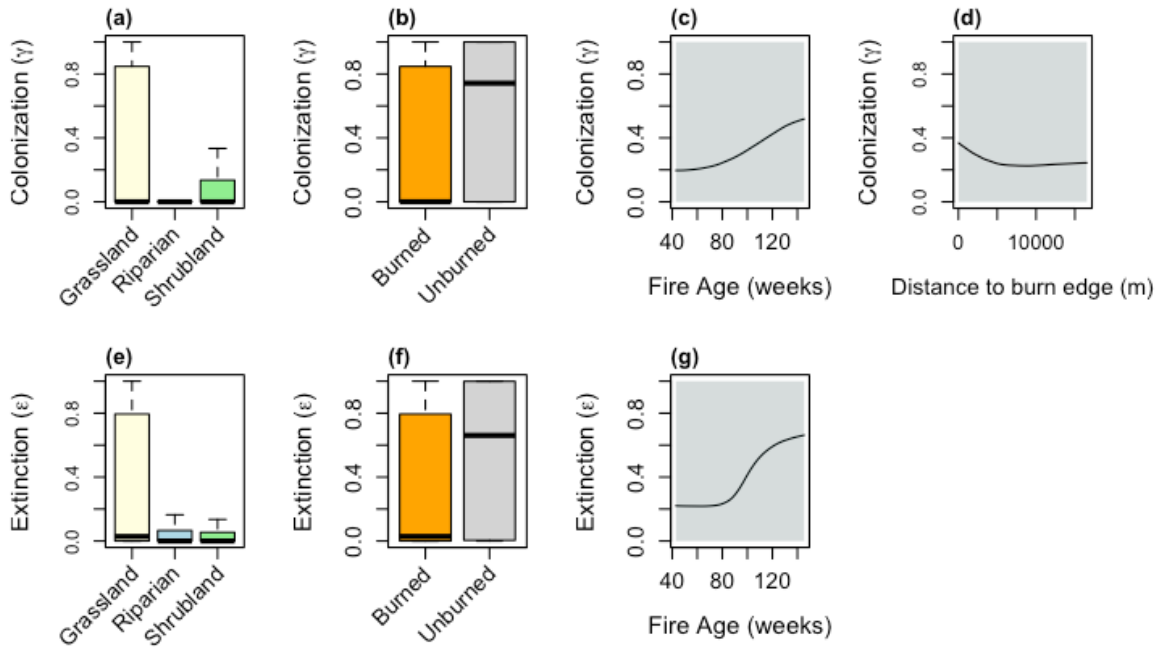


Figure 13. Model-averaged covariate relationships for probabilities of colonization (a-d) and local extinction (e-g) for bobcats. Plots show model-averaged mean covariate relationships (solid black line) and 95% confidence interval for slopes (shaded grey area).

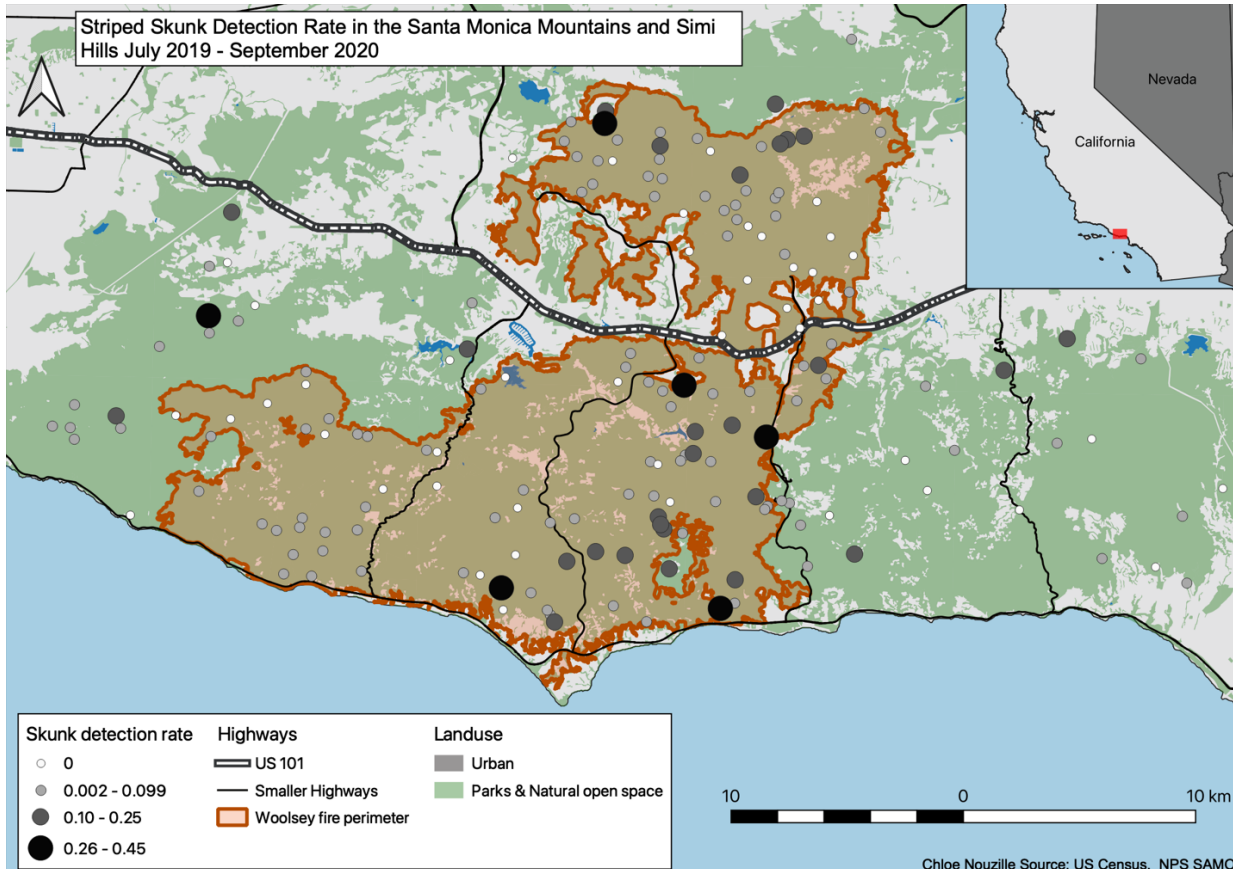


Figure 14. Striped skunk detection rates by site. Detection rate is the total number of detections at the site divided by the number of capture nights, i.e., the number of days a camera was at that site and operational. A value of 0.1 indicates less than 1 skunk detection occurs per day or that on average there are 10 skunk detections every 100 days.

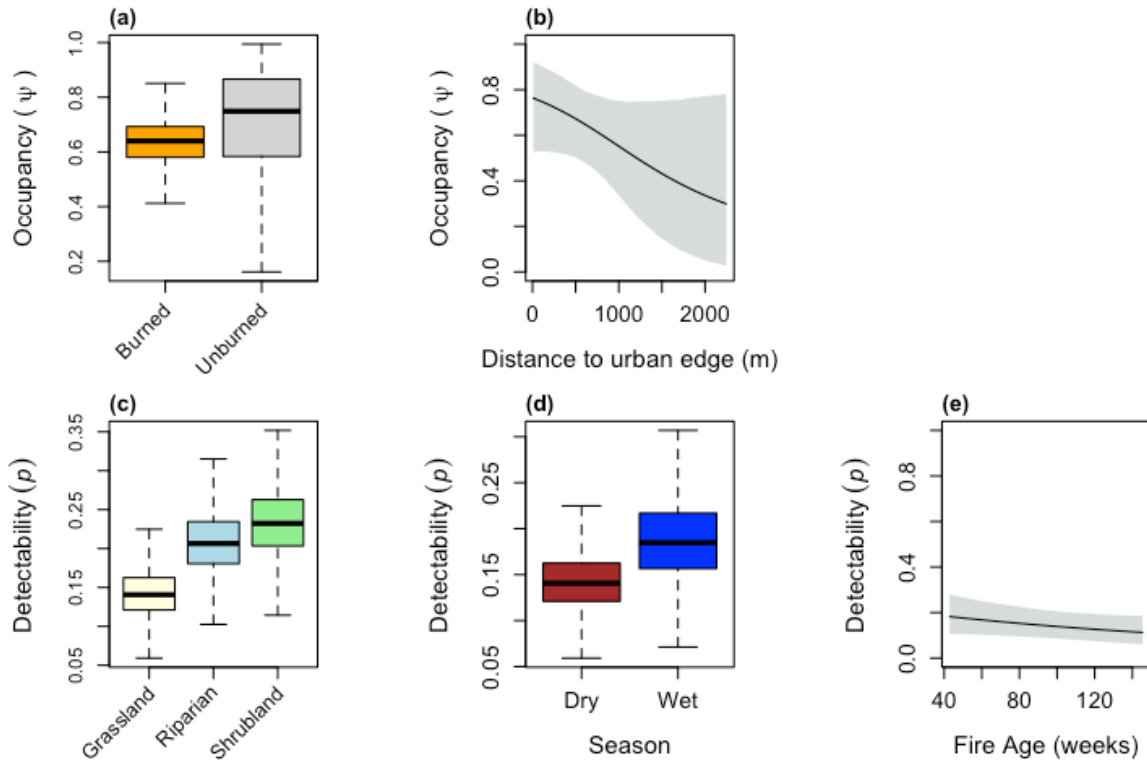


Figure 15. Model-averaged covariate relationships for occupancy (a, b) and detection (c) probabilities for striped skunks. Mean covariate relationships are depicted by a bold horizontal line and dotted black lines add shaded areas indicate 95% confidence intervals. Relationships estimated from parametric bootstrapping of model-averaged covariate and intercept means and standard errors.

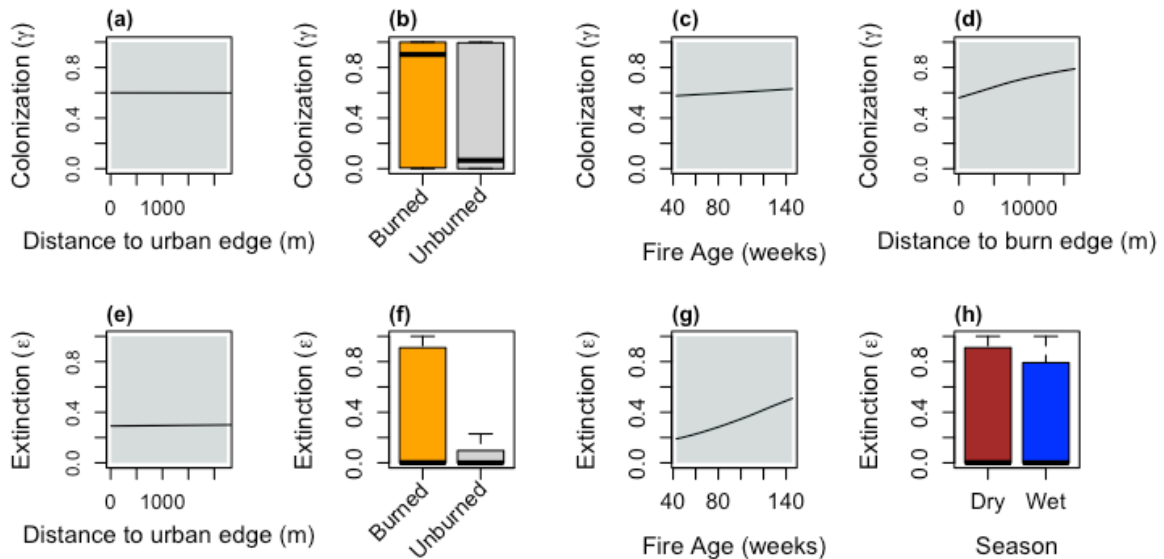


Figure 16. Model-averaged covariate relationships for probabilities of colonization (a-c) and local extinction (d-f) for striped skunks. Plots show model-averaged mean covariate relationships (solid black line) and 95% confidence interval for slopes (dashed black line or shaded grey area).

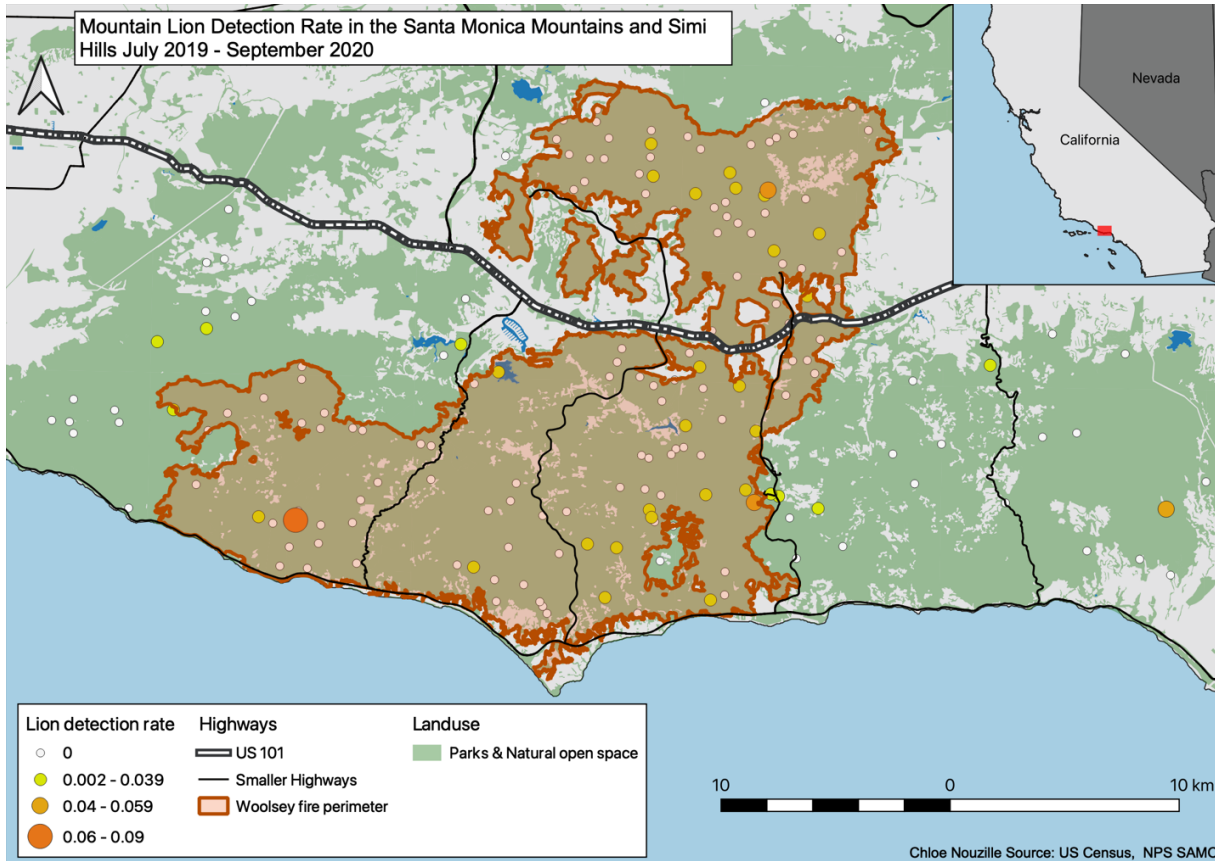


Figure 17. Mountain lion detection rates by site. Detection rate is the total number of detections at the site divided by the number of capture nights, i.e., the number of days a camera was at that site and operational. A value of 0.01 indicates less than 1 puma detection occurs per day or that on average there is 1 puma detection every 100 days.

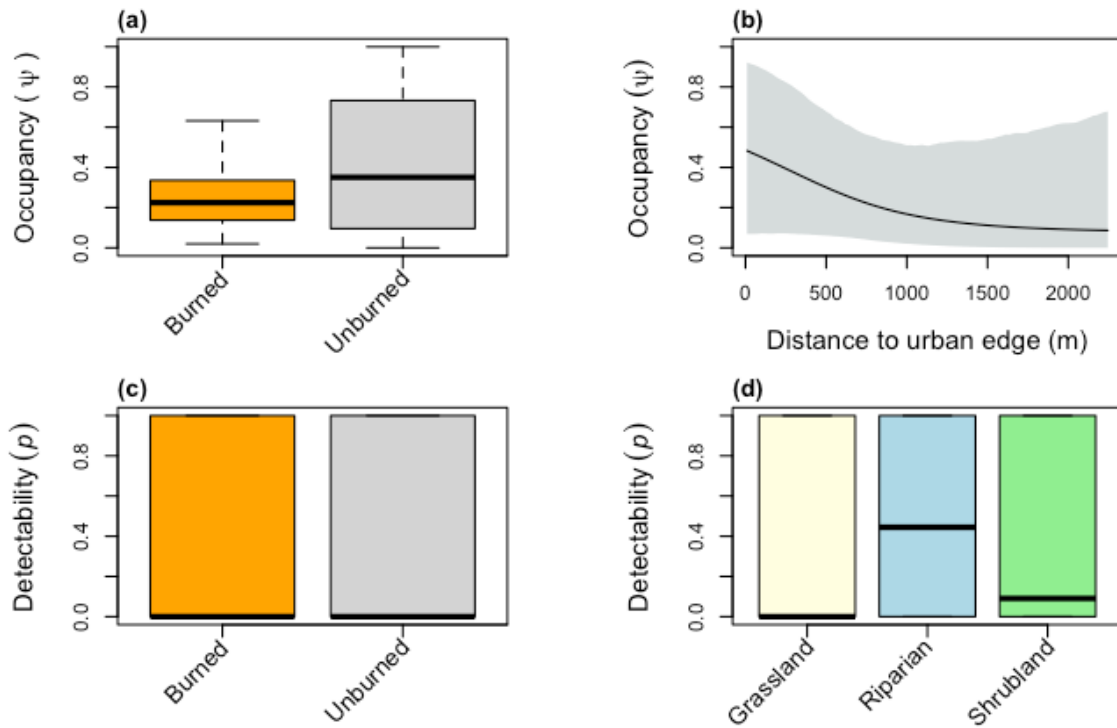


Figure 18. Model-averaged covariate relationships for occupancy (a, b) and detection (c,d) probabilities for mountain lions. Mean covariate relationships are depicted by a bold horizontal line and shaded areas indicate 95% confidence intervals. Relationships estimated from parametric bootstrapping of model-averaged covariate and intercept means and standard errors.

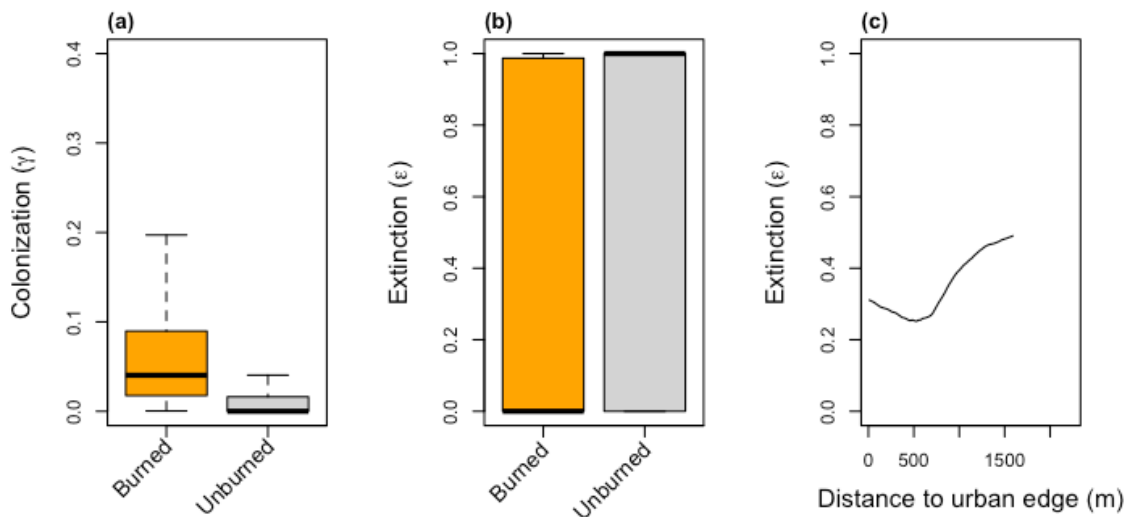


Figure 19. Model-averaged covariate relationships for probabilities of colonization (a-c) and local extinction (d-f) for mountain lions. Plots show model-averaged mean covariate relationships (solid black line) and 95% confidence interval for slopes (shaded grey area).

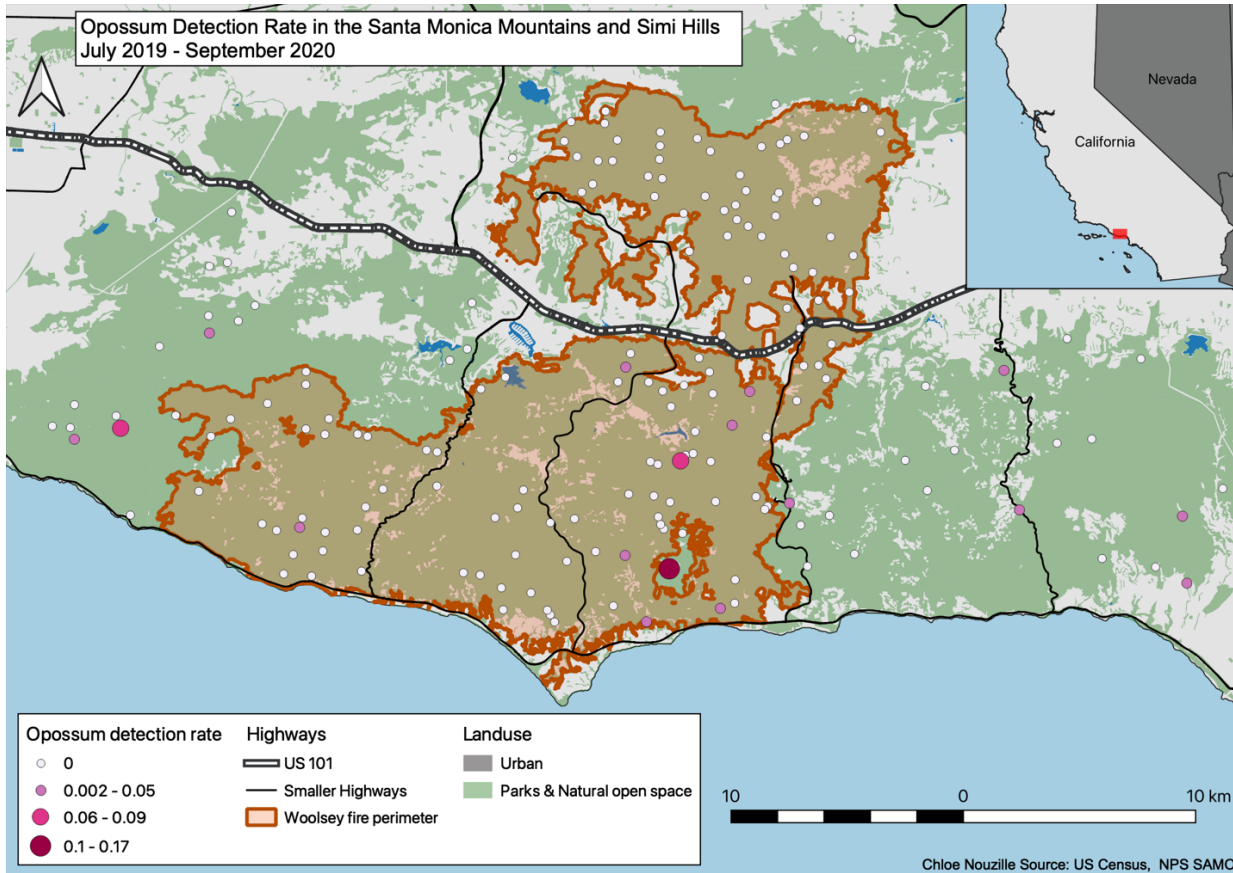


Figure 20. Opossum detection rates by site. Detection rate is the total number of detections at the site divided by the number of capture nights, i.e., the number of days a camera was at that site and operational. A value of 0.01 indicates less than 1 opossum detection occurs per day or that on average there is 1 opossum detection every 100 days.

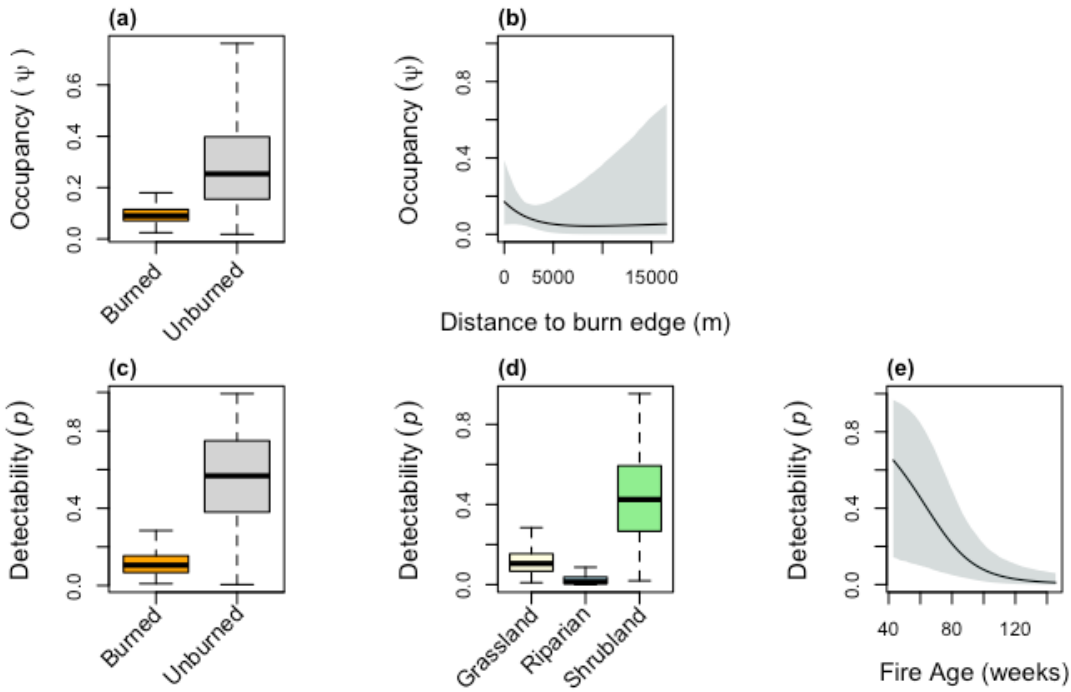


Figure 21. Model-averaged covariate relationships for occupancy (a, b) and detection (c-e) probabilities for opossums. Mean covariate relationships are depicted by a bold horizontal line and shaded areas indicate 95% confidence intervals. Relationships estimated from parametric bootstrapping of model-averaged covariate and intercept means and standard errors.

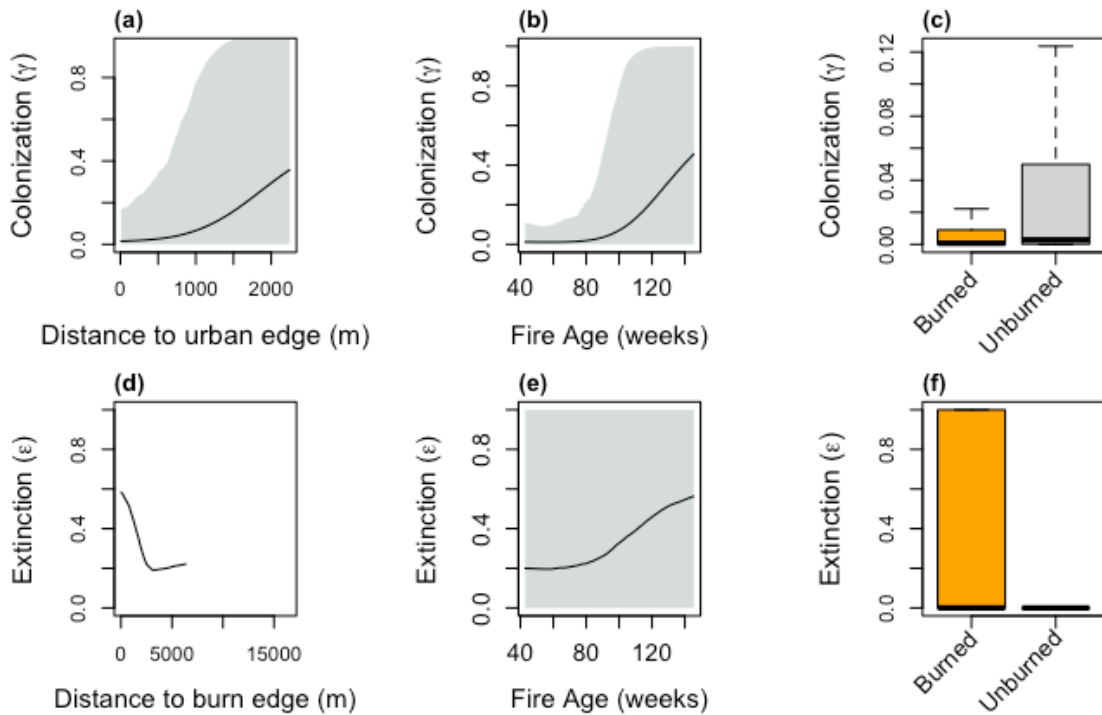


Figure 22. Model-averaged covariate relationships for probabilities of colonization (a-c) and local extinction (d-f) for opossums. Plots show model-averaged mean covariate relationships (solid black line) and 95% confidence interval for slopes (shaded gray area).

Appendix

Table A1. Table shows number of detections at each site by classification from July 2019 to September 2022. A detection is when at least one trigger event occurred in a given 24-hour period, i.e., 2 detections means there were 2 days where a deer was detected as least once. Bolded values in blue boxes represent total detections of each species. Values in parentheses represent total number of sites that fall under that site type (shown in Table 1).

Detections by Site Type					
		Shrubland	Riparian	Grassland	Total (by fire status)
<i>Deer</i>	Burned	623 (90)	197 (30)	158 (15)	978 (135)
	Control	217 (30)	65 (10)	48 (5)	330 (45)
	Total (by vegetation)	840 (120)	262 (40)	206 (20)	1308 (180)
<i>Bobcat</i>	Burned	449 (90)	175 (30)	30 (15)	654 (135)
	Control	206 (30)	58 (10)	7 (5)	271 (45)
	Total (by vegetation)	655 (120)	233 (40)	37	925 (180)
<i>Coyote</i>	Burned	258 (90)	183 (30)	633 (15)	1074 (135)
	Control	179 (30)	22 (10)	66 (5)	267 (45)
	Total (by vegetation)	437 (120)	205 (40)	699 (20)	1341 (180)
<i>Gray Fox</i>	Burned	1420 (90)	482 (30)	20 (15)	1922 (135)
	Control	559 (30)	92 (10)	10 (5)	661 (45)
	Total (by vegetation)	1979 (120)	574 (40)	30 (20)	2583 (180)
<i>Striped Skunk</i>	Burned	504 (90)	215 (30)	36 (15)	755 (135)
	Control	201 (30)	59 (10)	20 (5)	280 (45)
	Total (by vegetation)	705 (120)	274 (40)	56 (20)	1035 (180)
<i>Opossum</i>	Burned	4 (90)	15 (30)	0 (15)	19 (135)
	Control	4 (30)	72 (10)	0 (5)	76 (45)
	Total (by vegetation)	8 (120)	87 (40)	0	95 (180)
<i>Raccoon</i>	Burned	6 (90)	36 (30)	0 (15)	42 (135)
	Control	0 (30)	14 (10)	1 (5)	15 (45)
	Total (by vegetation)	6 (120)	50 (40)	1 (20)	57 (180)
<i>Mountain Lion</i>	Burned	20 (90)	26 (30)	2 (15)	48 (135)
	Control	4 (30)	11 (10)	0 (5)	15 (45)
	Total (by vegetation)	24 (120)	37 (40)	2 (20)	63 (180)

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

Candidate model
<i>Stage 1 - Candidate occupancy and detectability models</i>
psi(.) p(veg + fst)
psi(veg) p(veg + fst)
psi(du) p(veg + fst)
psi(.) p(veg)
psi(fst) p(veg + fst)
psi(.) p(veg + fst + seas)
psi(dB) p(veg + fst)
psi(.) p(veg + fst + fa)
psi(veg + fst) p(veg + fst)
psi(veg + du) p(veg + fst)
psi(.) p(veg + fst + doy + doy2)
psi(veg) p(veg)
psi(veg + dB) p(veg + fst)
psi(veg) p(veg + fst + seas)
psi(veg) p(veg + fst + fa)
psi(du) p(veg)
psi(fst + du) p(veg + fst)
psi(du) p(veg + fst + seas)
psi(du + dB) p(veg + fst)
psi(du) p(veg + fst + fa)
psi(.) p(veg + seas)
psi(dB) p(veg)
psi(.) p(veg + fa)
psi(fst) p(veg)
psi(veg + fst + du) p(veg + fst)
psi(.) p(veg + doy + doy2)
psi(fst + dB) p(veg + fst)
psi(fst) p(veg + fst + seas)
psi(fst) p(veg + fst + fa)
psi(dB) p(veg + fst + seas)
psi(dB) p(veg + fst + fa)
psi(veg + du) p(veg)
psi(veg) p(veg + fst + doy + doy2)
psi(veg + fst + dB) p(veg + fst)

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psi(veg + du + dB) p(veg + fst)
 psi(veg + fst) p(veg + fst + seas)
 psi(veg + fst) p(veg + fst + fa)
 psi(.) p(veg + fst + fa + seas)
 psi(veg + du) p(veg + fst + seas)
 psi(veg + du) p(veg + fst + fa)
 psi(du) p(veg + fst + doy + doy2)
 psi(fst) p(veg + fst + doy + doy2)
 psi(.) p(veg + fireStatus + season + doy + doy2)
 psi(veg + fst) p(veg)
 psi(.) p(veg + fst + fa + doy + doy2)
 psi(dB) p(veg + fst + doy + doy2)
 psi(veg + dB) p(veg)
 psi(veg) p(veg + seas)
 psi(veg) p(veg + fa)
 psi(veg) p(veg + doy + doy2)
 psi(veg + fst) p(veg + fst + doy + doy2)
 psi(veg + dB) p(veg + fst + seas)
 psi(veg + dB) p(veg + fst + fa)
 psi(du) p(veg + seas)
 psi(du + dB) p(veg)
 psi(du) p(veg + fa)
 psi(fst + du) p(veg)
 psi(fst + du + dB) p(veg + fst)
 psi(fst + du) p(veg + fst + seas)
 psi(fst + du) p(veg + fst + fa)
 psi(dB) p(veg + seas)
 psi(du + dB) p(veg + fst + seas)
 psi(du + dB) p(veg + fst + fa)
 psi(du) p(veg + doy + doy2)
 psi(.) p(veg + fa + seas)
 psi(fst) p(veg + seas)
 psi(fst + dB) p(veg)
 psi(dB) p(veg + fa)
 psi(fst) p(veg + fa)
 psi(.) p(veg + seas + doy + doy2)

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

psi(veg + fst + du) p(veg)
 psi(veg + fst + du + dB) p(veg + fst)
 psi(dB) p(veg + doy + doy2)
 psi(veg + fst + du) p(veg + fst + seas)
 psi(veg + fst + du) p(veg + fst + fa)
 psi(veg) p(veg + fst + fa + seas)
 psi(fst) p(veg + doy + doy2)
 psi(.) p(veg + fa + doy + doy2)
 psi(fst + dB) p(veg + fst + seas)
 psi(fst + dB) p(veg + fst + fa)
 psi(veg + du + dB) p(veg)
 psi(veg + du) p(veg + fst + doy + doy2)
 psi(veg + du) p(veg + seas)
 psi(veg) p(veg + fst + fa + doy + doy2)
 psi(veg + dB) p(veg + fst + doy + doy2)
 psi(veg + du) p(veg + fa)
 psi(veg + du) p(veg + doy + doy2)
 psi(veg) p(veg + fireStatus + season + doy + doy2)
 psi(veg + fst + dB) p(veg + fst + seas)
 psi(veg + fst + dB) p(veg + fst + fa)
 psi(veg + du + dB) p(veg + fst + seas)
 psi(veg + du + dB) p(veg + fst + fa)
 psi(fst) p(veg + fst + fa + seas)
 psi(du) p(veg + fst + fa + seas)
 psi(fst + dB) p(veg + fst + doy + doy2)
 psi(du) p(veg + fireStatus + season + doy + doy2)
 psi(fst + du) p(veg + fst + doy + doy2)
 psi(fst) p(veg + fireStatus + season + doy + doy2)
 psi(dB) p(veg + fst + fa + seas)
 psi(veg + fst) p(veg + fst + fa + seas)
 psi(du) p(veg + fst + fa + doy + doy2)
 psi(du + dB) p(veg + fst + doy + doy2)
 psi(.) p(veg + fst + fa + seas + doy + doy2)
 psi(fst) p(veg + fst + fa + doy + doy2)
 psi(dB) p(veg + fireStatus + season + doy + doy2)
 psi(veg + fst + dB) p(veg)

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psi(veg + fst) p(veg + seas)
 psi(veg + fst) p(veg + fa)
 psi(veg + fst) p(veg + doy + doy2)
 psi(dB) p(veg + fst + fa + doy + doy2)
 psi(veg + dB) p(veg + seas)
 psi(veg + dB) p(veg + fa)
 psi(veg + dB) p(veg + doy + doy2)
 psi(veg + fst) p(veg + fst + fa + doy + doy2)
 psi(veg) p(veg + seas + doy + doy2)
 psi(veg) p(veg + fa + doy + doy2)
 psi(veg + fst + dB) p(veg + fst + doy + doy2)
 psi(veg + fst) p(veg + fireStatus + season + doy + doy2)
 psi(veg + fst + du) p(veg + fst + doy + doy2)
 psi(du + dB) p(veg + seas)
 psi(du) p(veg + fa + seas)
 psi(fst + du) p(veg + seas)
 psi(fst + du + dB) p(veg)
 psi(du + dB) p(veg + fa)
 psi(du) p(veg + seas + doy + doy2)
 psi(fst + du) p(veg + fa)
 psi(fst + du + dB) p(veg + fst + seas)
 psi(fst + du + dB) p(veg + fst + fa)
 psi(fst + dB) p(veg + seas)
 psi(dB) p(veg + fa + seas)
 psi(du + dB) p(veg + doy + doy2)
 psi(fst + du) p(veg + doy + doy2)
 psi(du) p(veg + fa + doy + doy2)
 psi(fst) p(veg + fa + seas)
 psi(veg + dB) p(veg + fst + fa + seas)
 psi(fst + dB) p(veg + fa)
 psi(dB) p(veg + seas + doy + doy2)
 psi(veg + fst + du) p(veg + seas)
 psi(veg + fst + du) p(veg + fa)
 psi(veg + fst + du + dB) p(veg)
 psi(fst) p(veg + seas + doy + doy2)
 psi(.) p(veg + fa + seas + doy + doy2)

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psi(fst + dB) p(veg + doy + doy2)
 psi(veg + fst + du + dB) p(veg + fst + seas)
 psi(veg + fst + du) p(veg + doy + doy2)
 psi(veg + fst + du + dB) p(veg + fst + fa)
 psi(veg + du) p(veg + fst + fa + seas)
 psi(dB) p(veg + fa + doy + doy2)
 psi(fst) p(veg + fa + doy + doy2)
 psi(veg + du + dB) p(veg + fst + doy + doy2)
 psi(veg + du + dB) p(veg + seas)
 psi(veg + du + dB) p(veg + fa)
 psi(veg + dB) p(veg + fst + fa + doy + doy2)
 psi(veg + du + dB) p(veg + doy + doy2)
 psi(veg) p(veg + fa + seas)
 psi(veg + du) p(veg + fireStatus + season + doy + doy2)
 psi(veg + du) p(veg + fst + fa + doy + doy2)
 psi(veg) p(veg + fst + fa + seas + doy + doy2)
 psi(veg + du) p(veg + fa + seas)
 psi(veg + dB) p(veg + fireStatus + season + doy + doy2)
 psi(veg + du) p(veg + seas + doy + doy2)
 psi(veg + du) p(veg + fa + doy + doy2)
 psi(fst + dB) p(veg + fst + fa + seas)
 psi(fst + du) p(veg + fst + fa + seas)
 psi(fst + du + dB) p(veg + fst + doy + doy2)
 psi(fst + dB) p(veg + fireStatus + season + doy + doy2)
 psi(fst + du) p(veg + fireStatus + season + doy + doy2)
 psi(du + dB) p(veg + fst + fa + seas)
 psi(veg + fst + du) p(veg + fst + fa + seas)
 psi(fst + dB) p(veg + fst + fa + doy + doy2)
 psi(du) p(veg + fst + fa + seas + doy + doy2)
 psi(du + dB) p(veg + fireStatus + season + doy + doy2)
 psi(fst + du) p(veg + fst + fa + doy + doy2)
 psi(fst) p(veg + fst + fa + seas + doy + doy2)
 psi(veg + fst + dB) p(veg + fst + fa + seas)
 psi(du + dB) p(veg + fst + fa + doy + doy2)
 psi(dB) p(veg + fst + fa + seas + doy + doy2)
 psi(veg + fst + dB) p(veg + seas)

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psi(veg + fst + dB) p(veg + fa)
 psi(veg + fst + dB) p(veg + doy + doy2)
 psi(veg + fst) p(veg + seas + doy + doy2)
 psi(veg + fst) p(veg + fa + doy + doy2)
 psi(veg + fst + dB) p(veg + fst + fa + doy + doy2)
 psi(veg + dB) p(veg + seas + doy + doy2)
 psi(veg + dB) p(veg + fa + doy + doy2)
 psi(veg + fst) p(veg + fst + fa + seas + doy + doy2)
 psi(veg) p(veg + fa + seas + doy + doy2)
 psi(veg + fst + dB) p(veg + fireStatus + season + doy + doy2)
 psi(veg + fst + du + dB) p(veg + fst + doy + doy2)
 psi(veg + fst + du) p(veg + fireStatus + season + doy + doy2)
 psi(veg + fst + du) p(veg + fst + fa + doy + doy2)
 psi(fst + du + dB) p(veg + seas)
 psi(du + dB) p(veg + fa + seas)
 psi(fst + du) p(veg + fa + seas)
 psi(fst + du + dB) p(veg + fa)
 psi(du + dB) p(veg + seas + doy + doy2)
 psi(fst + du) p(veg + seas + doy + doy2)
 psi(du) p(veg + fa + seas + doy + doy2)
 psi(veg + fst) p(veg + fa + seas)
 psi(fst + dB) p(veg + fa + seas)
 psi(fst + du + dB) p(veg + doy + doy2)
 psi(veg + du + dB) p(veg + fst + fa + seas)
 psi(du + dB) p(veg + fa + doy + doy2)
 psi(fst + du) p(veg + fa + doy + doy2)
 psi(fst + dB) p(veg + seas + doy + doy2)
 psi(dB) p(veg + fa + seas + doy + doy2)
 psi(veg + fst + du + dB) p(veg + seas)
 psi(veg + fst + du + dB) p(veg + fa)
 psi(veg + fst + du) p(veg + seas + doy + doy2)
 psi(veg + fst + du + dB) p(veg + doy + doy2)
 psi(fst) p(veg + fa + seas + doy + doy2)
 psi(fst + dB) p(veg + fa + doy + doy2)
 psi(veg + fst + du) p(veg + fa + doy + doy2)
 psi(veg + du + dB) p(veg + fireStatus + season + doy + doy2)

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

psi(veg + du + dB) p(veg + fst + fa + doy + doy2)
psi(veg + dB) p(veg + fst + fa + seas + doy + doy2)
psi(veg + dB) p(veg + fa + seas)
psi(veg + du + dB) p(veg + seas + doy + doy2)
psi(veg + du + dB) p(veg + fa + doy + doy2)
psi(veg + du) p(veg + fst + fa + seas + doy + doy2)
psi(veg + du) p(veg + fa + seas + doy + doy2)
psi(.) p(.)
psi(.) p(fst)
psi(fst + du + dB) p(veg + fst + fa + seas)
psi(fst + du + dB) p(veg + fireStatus + season + doy + doy2)
psi(fst + dB) p(veg + fst + fa + seas + doy + doy2)
psi(fst + du + dB) p(veg + fst + fa + doy + doy2)
psi(veg + fst + du + dB) p(veg + fst + fa + seas)
psi(fst + du) p(veg + fst + fa + seas + doy + doy2)
psi(veg + fst + du) p(veg + fa + seas)
psi(du + dB) p(veg + fst + fa + seas + doy + doy2)
psi(veg + fst + dB) p(veg + seas + doy + doy2)
psi(veg + fst + dB) p(veg + fa + doy + doy2)
psi(veg + fst) p(veg + fa + seas + doy + doy2)
psi(veg + fst + dB) p(veg + fst + fa + seas + doy + doy2)
psi(veg + dB) p(veg + fa + seas + doy + doy2)
psi(veg + du + dB) p(veg + fa + seas)
psi(veg + fst + du + dB) p(veg + fireStatus + season + doy + doy2)
psi(veg + fst + du + dB) p(veg + fst + fa + doy + doy2)
psi(veg + fst + du) p(veg + fst + fa + seas + doy + doy2)
psi(fst + du + dB) p(veg + fa + seas)
psi(fst + du + dB) p(veg + seas + doy + doy2)
psi(veg + fst + dB) p(veg + fa + seas)
psi(du + dB) p(veg + fa + seas + doy + doy2)
psi(dB) p(.)
psi(.) p(seas)
psi(.) p(fa)
psi(fst + du) p(veg + fa + seas + doy + doy2)
psi(fst + du + dB) p(veg + fa + doy + doy2)
psi(fst + dB) p(veg + fa + seas + doy + doy2)

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

psi(veg + fst + du + dB) p(veg + seas + doy + doy2)
psi(veg + fst + du) p(veg + fa + seas + doy + doy2)
psi(veg + fst + du + dB) p(veg + fa + doy + doy2)
psi(veg + du + dB) p(veg + fst + fa + seas + doy + doy2)
psi(veg + du + dB) p(veg + fa + seas + doy + doy2)
psi(veg) p(.)
psi(du) p(.)
psi(.) p(fst + fa)
psi(.) p(fst + seas)
psi(du) p(fst)
psi(fst) p(.)
psi(dB) p(fst)
psi(fst) p(fst)
psi(fst + du + dB) p(veg + fst + fa + seas + doy + doy2)
psi(.) p(doy + doy2)
psi(veg + fst + du + dB) p(veg + fa + seas)
psi(.) p(fst + doy + doy2)
psi(veg + fst + dB) p(veg + fa + seas + doy + doy2)
psi(veg + du) p(.)
psi(veg) p(fst)
psi(veg + fst + du + dB) p(veg + fst + fa + seas + doy + doy2)
psi(du) p(fa)
psi(du) p(seas)
psi(du + dB) p(.)
psi(dB) p(fa)
psi(dB) p(seas)
psi(.) p(fa + seas)
psi(fst + du + dB) p(veg + fa + seas + doy + doy2)
psi(fst + dB) p(.)
psi(fst) p(fa)
psi(fst) p(seas)
psi(veg) p(seas)
psi(veg + fst + du + dB) p(veg + fa + seas + doy + doy2)
psi(dB) p(doy + doy2)
psi(.) p(season + doy + doy2)
psi(veg + fst) p(.)

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psi(fst) p(fst + fa)
 psi(dB) p(fst + fa)
 psi(veg) p(fst + fa)
 psi(.) p(fst + fa + seas)
 psi(du) p(fst + fa)
 psi(fst + du) p(.)
 psi(du) p(fst + seas)
 psi(dB) p(fst + seas)
 psi(du + dB) p(fst)
 psi(veg + du) p(fst)
 psi(fst + dB) p(fst)
 psi(fst) p(fst + seas)
 psi(.) p(fst + fa + doy + doy2)
 psi(veg) p(doy + doy2)
 psi(fst + du) p(fst)
 psi(veg + dB) p(.)
 psi(veg) p(fa)
 psi(du) p(doy + doy2)
 psi(.) p(fa + doy + doy2)
 psi(fst) p(doy + doy2)
 psi(.) p(fst + seas + doy + doy2)
 psi(du) p(fst + doy + doy2)
 psi(veg) p(fst + seas)
 psi(veg + du) p(seas)
 psi(dB) p(fst + doy + doy2)
 psi(fst) p(fst + doy + doy2)
 psi(veg + fst) p(fst)
 psi(veg + du) p(fa)
 psi(veg + fst + du) p(.)
 psi(veg + dB) p(fst)
 psi(du + dB) p(fa)
 psi(du + dB) p(seas)
 psi(du) p(fa + seas)
 psi(dB) p(fa + seas)
 psi(veg + dB) p(fst + seas)
 psi(veg + du) p(doy + doy2)

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psi(veg + fst) p(fst + fa)
 psi(veg) p(fa + seas)
 psi(fst + dB) p(seas)
 psi(fst + du + dB) p(.)
 psi(fst + dB) p(fa)
 psi(fst + du) p(fa)
 psi(fst + du) p(seas)
 psi(veg) p(fst + doy + doy2)
 psi(fst) p(fa + seas)
 psi(veg + fst) p(seas)
 psi(veg + dB) p(seas)
 psi(du) p(fa + doy + doy2)
 psi(.) p(fa + seas + doy + doy2)
 psi(dB) p(season + doy + doy2)
 psi(du + dB) p(doy + doy2)
 psi(du) p(season + doy + doy2)
 psi(veg + fst) p(fa)
 psi(veg) p(season + doy + doy2)
 psi(fst + dB) p(doy + doy2)
 psi(veg + du) p(fst + seas)
 psi(veg + dB) p(fa)
 psi(fst) p(season + doy + doy2)
 psi(fst + dB) p(fst + fa)
 psi(veg + fst + du) p(fst)
 psi(veg + dB) p(fst + fa)
 psi(veg + du) p(fst + fa)
 psi(du) p(fst + fa + seas)
 psi(veg + du + dB) p(.)
 psi(dB) p(fst + fa + seas)
 psi(du + dB) p(fst + fa)
 psi(veg + fst + dB) p(.)
 psi(fst) p(fst + fa + seas)
 psi(fst + du) p(fst + fa)
 psi(du) p(fst + fa + doy + doy2)
 psi(du + dB) p(fst + seas)
 psi(fst + dB) p(fst + seas)

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psi(fst + du + dB) p(fst)
psi(veg + du + dB) p(fst)
psi(fst + du) p(fst + seas)
psi(veg + fst) p(doy + doy2)
psi(fst) p(fst + fa + doy + doy2)
psi(dB) p(fst + fa + doy + doy2)
psi(veg) p(fst + fa + doy + doy2)
psi(.) p(fst + fa + seas + doy + doy2)
psi(veg + fst) p(fst + seas)
psi(veg) p(fst + fa + seas)
psi(fst + du) p(doy + doy2)
psi(veg + fst + du) p(seas)
psi(dB) p(fa + doy + doy2)
psi(fst) p(fa + doy + doy2)
psi(veg + du) p(fst + doy + doy2)
psi(du) p(fst + seas + doy + doy2)
psi(veg + du) p(fa + seas)
psi(dB) p(fst + seas + doy + doy2)
psi(veg + du + dB) p(seas)
psi(du + dB) p(fst + doy + doy2)
psi(fst + dB) p(fst + doy + doy2)
psi(fst) p(fst + seas + doy + doy2)
psi(veg) p(fa + doy + doy2)
psi(fst + du) p(fst + doy + doy2)
psi(veg + dB) p(doy + doy2)
psi(veg + fst + dB) p(fst + seas)
psi(veg + fst + du) p(fa)
psi(veg + du + dB) p(fa)
psi(veg + fst + dB) p(fst)
psi(veg + fst + du + dB) p(.)
psi(veg + du) p(season + doy + doy2)
psi(veg) p(fst + seas + doy + doy2)
psi(veg + du) p(fa + doy + doy2)
psi(veg + fst + du) p(fst + seas)
psi(veg + fst) p(fst + doy + doy2)
psi(veg + fst + du) p(doy + doy2)

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psi(du + dB) p(fa + seas)
 psi(veg + du + dB) p(doy + doy2)
 psi(fst + du + dB) p(seas)
 psi(fst + du + dB) p(fa)
 psi(fst + dB) p(fa + seas)
 psi(veg + fst) p(fa + seas)
 psi(fst + du) p(fa + seas)
 psi(veg + fst + dB) p(fst + fa)
 psi(veg + dB) p(fa + seas)
 psi(veg + dB) p(fst + doy + doy2)
 psi(veg + fst + dB) p(seas)
 psi(du + dB) p(fa + doy + doy2)
 psi(dB) p(fa + seas + doy + doy2)
 psi(du) p(fa + seas + doy + doy2)
 psi(veg) p(fa + seas + doy + doy2)
 psi(veg + du) p(fst + fa + seas)
 psi(du + dB) p(season + doy + doy2)
 psi(veg + fst) p(fst + fa + doy + doy2)
 psi(fst + du) p(fa + doy + doy2)
 psi(fst) p(fa + seas + doy + doy2)
 psi(veg + fst) p(season + doy + doy2)
 psi(fst + dB) p(season + doy + doy2)
 psi(fst + du + dB) p(doy + doy2)
 psi(veg + du + dB) p(fst + seas)
 psi(fst + du) p(season + doy + doy2)
 psi(veg + fst + du) p(fst + fa)
 psi(veg + fst + dB) p(fa)
 psi(veg + dB) p(season + doy + doy2)
 psi(veg + du + dB) p(fst + fa)
 psi(veg + fst + du + dB) p(fst)
 psi(du + dB) p(fst + fa + seas)
 psi(fst + dB) p(fst + fa + seas)
 psi(fst + du + dB) p(fst + fa)
 psi(fst + du) p(fst + fa + seas)
 psi(veg + du) p(fst + fa + doy + doy2)
 psi(fst + du + dB) p(fst + seas)

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psi(fst + du) p(fst + fa + doy + doy2)
 psi(veg + du) p(fst + seas + doy + doy2)
 psi(du + dB) p(fst + fa + doy + doy2)
 psi(veg + fst) p(fst + fa + seas)
 psi(veg + dB) p(fst + fa + doy + doy2)
 psi(veg + fst) p(fa + doy + doy2)
 psi(fst + dB) p(fst + fa + doy + doy2)
 psi(veg + fst + du) p(fst + doy + doy2)
 psi(du) p(fst + fa + seas + doy + doy2)
 psi(dB) p(fst + fa + seas + doy + doy2)
 psi(fst) p(fst + fa + seas + doy + doy2)
 psi(veg + dB) p(fst + fa + seas)
 psi(veg + fst + du) p(fa + seas)
 psi(veg + du + dB) p(fa + seas)
 psi(veg + fst + dB) p(doy + doy2)
 psi(du + dB) p(fst + seas + doy + doy2)
 psi(veg + du + dB) p(fst + doy + doy2)
 psi(fst + dB) p(fst + seas + doy + doy2)
 psi(veg + fst + du + dB) p(seas)
 psi(fst + dB) p(fa + doy + doy2)
 psi(fst + du + dB) p(fst + doy + doy2)
 psi(fst + du) p(fst + seas + doy + doy2)
 psi(veg + dB) p(fa + doy + doy2)
 psi(veg) p(fst + fa + seas + doy + doy2)
 psi(veg + fst) p(fst + seas + doy + doy2)
 psi(veg + du) p(fa + seas + doy + doy2)
 psi(veg + fst + du) p(season + doy + doy2)
 psi(veg + fst + du + dB) p(fa)
 psi(veg + du + dB) p(season + doy + doy2)
 psi(veg + dB) p(fst + seas + doy + doy2)
 psi(veg + fst + du) p(fa + doy + doy2)
 psi(veg + du + dB) p(fa + doy + doy2)
 psi(veg + fst + dB) p(fst + doy + doy2)
 psi(fst + du + dB) p(fa + seas)
 psi(veg + fst + du) p(fst + fa + doy + doy2)
 psi(veg + fst + dB) p(fa + seas)

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psi(veg + fst + du) p(fst + fa + seas)
psi(du + dB) p(fa + seas + doy + doy2)
psi(veg + du + dB) p(fst + fa + seas)
psi(veg + fst + du + dB) p(fst + seas)
psi(veg + fst) p(fa + seas + doy + doy2)
psi(fst + du + dB) p(fa + doy + doy2)
psi(fst + dB) p(fa + seas + doy + doy2)
psi(fst + du) p(fa + seas + doy + doy2)
psi(veg + dB) p(fa + seas + doy + doy2)
psi(veg + fst + dB) p(fst + fa + doy + doy2)
psi(fst + du + dB) p(season + doy + doy2)
psi(veg + fst + dB) p(season + doy + doy2)
psi(veg + fst + du + dB) p(fst + fa)
psi(veg + du) p(fst + fa + seas + doy + doy2)
psi(veg + fst + du) p(fst + seas + doy + doy2)
psi(fst + du + dB) p(fst + fa + seas)
psi(veg + du + dB) p(fst + seas + doy + doy2)
psi(fst + du + dB) p(fst + fa + doy + doy2)
psi(veg + du + dB) p(fst + fa + doy + doy2)
psi(veg + fst + dB) p(fa + doy + doy2)
psi(veg + fst + dB) p(fst + fa + seas)
psi(du + dB) p(fst + fa + seas + doy + doy2)
psi(veg + fst + du + dB) p(fst + doy + doy2)
psi(fst + dB) p(fst + fa + seas + doy + doy2)
psi(fst + du) p(fst + fa + seas + doy + doy2)
psi(fst + du + dB) p(fst + seas + doy + doy2)
psi(veg + fst + du + dB) p(fa + seas)
psi(veg + fst) p(fst + fa + seas + doy + doy2)
psi(veg + dB) p(fst + fa + seas + doy + doy2)
psi(veg + fst + du) p(fa + seas + doy + doy2)
psi(veg + du + dB) p(fa + seas + doy + doy2)
psi(veg + fst + dB) p(fst + seas + doy + doy2)
psi(veg + fst + du + dB) p(season + doy + doy2)
psi(veg + fst + du + dB) p(fa + doy + doy2)
psi(veg + fst + du + dB) p(fst + fa + doy + doy2)
psi(veg + fst + du + dB) p(fst + fa + seas)

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psi(fst + du + dB) p(fa + seas + doy + doy2)
psi(veg + fst + dB) p(fa + seas + doy + doy2)
psi(veg + fst + du) p(fst + fa + seas + doy + doy2)
psi(veg + du + dB) p(fst + fa + seas + doy + doy2)
psi(veg + fst + du + dB) p(fst + seas + doy + doy2)
psi(fst + du + dB) p(fst + fa + seas + doy + doy2)
psi(veg + fst + dB) p(fst + fa + seas + doy + doy2)
psi(veg + fst + du + dB) p(fa + seas + doy + doy2)
psi(veg + fst + du + dB) p(fst + fa + seas + doy + doy2)
psi(veg + fst + du + dB) p(doy + doy2)

Stage 2 - Candidate colonization and extinction models

- g(fst + seas) e(.)
- g(fst + seas) e(fst)
- g(seas) e(.)
- g(fst + seas) e(veg + fst)
- g(veg + fst + seas) e(.)
- g(veg + fst + du + seas) e(.)
- g(veg + seas) e(.)
- g(veg + fst + du) e(.)
- g(fst + fa + seas + fst*fa) e(.)
- g(veg + fst + seas) e(fst)
- g(veg + fst + du) e(veg + seas)
- g(fst + fa + seas) e(.)
- g(fa + seas) e(.)
- g(veg + fst + du + seas) e(fst)
- g(fst + du + seas) e(.)
- g(fst + du + seas) e(fst)
- g(fst + seas) e(du)
- g(fst) e(.)
- g(veg + fst + du) e(veg + du + seas)
- g(veg + du + seas) e(.)
- g(fst + fa + seas) e(fst)
- g(veg + fst + du) e(fst)
- g(fst + seas) e(dB)
- g(veg + fst + du) e(veg)
- g(veg + fst) e(.)

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g(fst + fa) e(.)
g(veg + fst + du) e(seas)
g(fst + du + seas) e(veg + fst)
g(fst + seas) e(fst + du)
g(fa) e(.)
g(.) e(.)
g(fst) e(fst)
g(seas) e(du)
g(seas + dB) e(.)
g(veg) e(.)
g(veg + fst + seas) e(dB)
g(du + seas) e(.)
g(veg + fst + seas) e(du)
g(veg + fst) e(fst)
g(fst + fa + seas) e(veg + fst)
g(veg + fst + du + seas) e(veg)
g(veg + du) e(.)
g(fst + fa) e(fst)
g(veg + fst + du + fa) e(.)
g(veg + fst + du + seas) e(dB)
g(veg + fst + du) e(dB)
g(veg + fst + du) e(veg + du)
g(fst + seas + dB) e(.)
g(veg + fst + fa + seas) e(.)
g(fst + seas + dB) e(fst)
g(fst + seas) e(fst + x)
g(veg + fa + seas) e(.)
g(veg + fst + fa + fst*fa) e(.)
g(veg + fst + fa + seas + fst*fa) e(.)
g(veg + fst + seas) e(veg)
g(fst + seas) e(seas)
g(fst) e(du)
g(fst + seas) e(fa)
g(veg + fst + seas) e(veg + fst)
g(fst + seas) e(veg + fst + dB)
g(veg + fst + fa) e(.)

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g(fst + fa + seas + fst*fa) e(fst)
 g(fst + seas) e(fst + fa)
 g(veg + seas) e(veg)
 g(fst + seas) e(fst + seas)
 g(fst + seas) e(veg)
 g(veg + seas) e(du)
 g(fst + fa + seas + fst*fa) e(dB)
 g(seas) e(dB)
 g(veg + fst) e(seas)
 g(seas) e(seas)
 g(fst + du) e(.)
 g(veg) e(seas)
 g(seas) e(fa)
 g(veg + fst + du) e(veg + fst + du + seas)
 g(seas) e(fst)
 g(veg + du) e(veg + seas)
 g(veg + fst) e(veg + seas)
 g(fst + seas) e(veg + fst + du)
 g(veg + fst + du) e(veg + fst + seas)
 g(fst) e(veg + fst)
 g(veg + fst) e(du)
 g(veg + fst + du) e(fst + seas)
 g(fst + fa + seas + fst*fa) e(fa)
 g(fst + seas) e(veg + fst + seas)
 g(fst + seas) e(veg + fst + fa)
 g(veg + du) e(seas)
 g(veg + fst + seas + dB) e(.)
 g(veg + fst + du + fa + seas) e(.)
 g(veg + fst + du) e(veg + fst)
 g(veg + fa) e(.)
 g(fst + du + fa + seas) e(.)
 g(veg + fst + du + seas) e(seas)
 g(veg + seas) e(seas)
 g(fst + fa) e(du)
 g(fst + fa + seas + fst*fa) e(du)
 g(veg + fst + seas) e(fst + du)

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g(veg + fst + seas) e(seas)
g(veg + fst + fa + seas) e(fst)
g(veg + fst + du + seas) e(veg + du)
g(fst + fa + seas) e(du)
g(veg + fst + du + seas) e(veg + fst)
g(veg + du) e(veg + du + seas)
g(fst + fa + seas) e(dB)
g(veg + seas + dB) e(.)
g(veg + fst) e(veg)
g(veg + fst + du + dB) e(.)
g(fst + du + fa + fst*fa) e(.)
g(fst) e(seas)
g(veg + fst + du + seas) e(veg + fst + du)
g(veg + fst + du) e(veg + seas + dB)
g(veg + fst + du) e(veg + dB)
g(fst + du + seas) e(dB)
g(veg + seas) e(dB)
g(veg + du + seas) e(veg)
g(fst + du + fa) e(.)
g(fst + du) e(fst)
g(veg) e(veg + seas)
g(veg + fst + du + seas + dB) e(.)
g(fst + du + fa + seas + fst*fa) e(.)
g(veg + fst + seas) e(fa)
g(veg + fst + seas + dB) e(fst)
g(fst + du + fa + seas) e(fst)
g(fst + seas) e(du + dB)
g(veg + fst + fa) e(fst)
g(veg + fst + du + fa) e(veg + seas)
g(veg + fst + du + fa + fst*fa) e(.)
g(veg + du + dB) e(veg + du + seas)
g(veg + fst + du + seas) e(du)
g(.) e(seas)
g(veg + fst + du) e(fa)
g(seas) e(veg)
g(veg + fst + du + seas) e(fa)

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g(veg + fst + du) e(du)
g(veg + seas) e(fst)
g(veg + fst + du) e(veg + fst + du)
g(veg + seas) e(fa)
g(fst) e(dB)
g(veg + fst + du + fa) e(fst)
g(veg + fst) e(dB)
g(veg + fst + du + seas) e(veg + seas)
g(fa + seas) e(du)
g(fst) e(fst + du)
g(veg + fst) e(fst + seas)
g(fst + fa + seas + fst*fa) e(seas)
g(.) e(du)
g(veg + fst + seas) e(fst + x)
g(fst + seas) e(veg + dB)
g(fa + seas + dB) e(.)
g(veg + fst + seas) e(fst + seas)
g(veg + fst + du + fa) e(seas)
g(fa + seas) e(fa)
g(fst + fa) e(dB)
g(fa) e(seas)
g(fa) e(fa)
g(veg + fst + du) e(veg + du + seas + dB)
g(fst + fa) e(seas)
g(du + fa + seas) e(.)
g(fst + fa) e(fa)
g(veg + fst + fa + fst*fa) e(seas)
g(veg + du + seas + dB) e(.)
g(veg + fst) e(veg + fst + seas)
g(fst) e(fst + seas)
g(fst + fa + seas) e(fa)
g(fa) e(du)
g(fst + fa + seas + dB + fst*fa) e(.)
g(veg + fst + du + fa) e(veg + du + seas)
g(veg + fst + seas) e(fst + fa)
g(veg + du + fa + seas) e(.)

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g(fst + fa + seas) e(fst + du)
g(veg + fst) e(veg + fst)
g(veg + du) e(veg)
g(veg + fst + du + seas) e(veg + du + seas)
g(veg + fst + du + fa + seas) e(fst)
g(veg) e(du)
g(veg + fst + du) e(seas + dB)
g(veg + du + seas) e(seas)
g(veg + du + dB) e(veg + seas)
g(fst + fa + dB + fst*fa) e(.)
g(veg + fst + fa) e(seas)
g(fst + du + fa) e(fst)
g(veg + fst + du + seas + dB) e(fst)
g(veg + du + fa) e(.)
g(veg + fst + du + seas) e(fst + seas)
g(veg + fa) e(seas)
g(veg + fst + du + fa) e(veg)
g(veg + fst) e(fst + du)
g(veg + fst + du + seas) e(fst + du)
g(veg + fst + du + seas) e(fst + x)
g(veg + fst + du) e(veg + fa + seas)
g(veg) e(veg)
g(veg + fst + du + dB) e(veg + seas)
g(veg + fst + dB) e(.)
g(fst + fa + seas) e(fst + fa)
g(fa + seas) e(dB)
g(veg + fst) e(du + seas)
g(veg + fst + fa) e(du)
g(veg + du + dB) e(veg + dB)
g(veg + fst + du + dB) e(fst)
g(veg + du + seas) e(veg + du)
g(fst + fa) e(veg + fst)
g(veg + fst + seas) e(veg + dB)
g(fa + seas) e(seas)
g(veg + fst + du + seas) e(veg + dB)
g(veg + fst + seas) e(du + dB)

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g(fst + fa + seas + dB) e(.)
g(fst + fa + seas) e(seas)
g(fst + du + seas) e(du)
g(fst + du + seas) e(fst + x)
g(fst + fa) e(fst + du)
g(veg + fst + du + fa + seas + fst*fa) e(.)
g(du) e(.)
g(veg + fst + du) e(veg + du + fa + seas)
g(fa + seas) e(fst)
g(veg + fst + du) e(veg + du + dB)
g(fst + x) e(.)
g(veg + fst + du + seas) e(fst + fa)
g(fst + du + seas) e(veg + fst + du)
g(veg + seas) e(veg + seas)
g(veg + fst + fa + fst*fa) e(fa)
g(veg + fst + du + dB) e(veg + du + seas)
g(fst + du + seas + dB) e(.)
g(fst + fa) e(fst + seas)
g(fst + du + seas) e(seas)
g(veg + fst + du + fa) e(dB)
g(veg + fst + seas) e(veg + seas)
g(fst + fa + seas + fst*fa) e(fst + fa)
g(fst + du + fa + seas) e(veg + fst)
g(fst + du + seas) e(fa)
g(du + fa) e(.)
g(veg + fst + du) e(fst + x)
g(fst + seas + dB) e(du)
g(fst + du + seas) e(fst + fa)
g(fa + dB) e(.)
g(fst + du + seas) e(fst + seas)
g(veg + du + seas) e(dB)
g(fst + du + seas) e(fst + du)
g(veg + fst + fa + seas + fst*fa) e(dB)
g(fst + fa) e(fst + fa)
g(fst) e(fa)
g(fst + seas) e(du + fa)

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g(seas + dB) e(du)
g(veg + fst + du) e(fst + du)
g(fst + seas) e(du + seas)
g(veg + fst + fa + seas) e(dB)
g(veg + fst + fa + fst*fa) e(dB)
g(seas + dB) e(dB)
g(du + seas + dB) e(.)
g(veg + dB) e(veg + dB)
g(fst + fa + seas) e(fst + x)
g(veg + du + seas) e(fa)
g(veg + fst + fa + fst*fa) e(du)
g(veg + fst + fa) e(dB)
g(dB) e(.)
g(veg + fst + fa + fst*fa) e(fst)
g(veg + du + seas) e(du)
g(fst + du + seas) e(veg + fst + dB)
g(fst + fa + seas + dB) e(fst)
g(fst) e(du + seas)
g(veg + du + seas) e(fst)
g(veg + fst + du + fa + fst*fa) e(seas)
g(veg + fst + du) e(fst + fa)
g(fst + du) e(veg + fst)
g(veg) e(du + seas)
g(fst + du + seas) e(veg)
g(veg + du + seas) e(veg + seas)
g(veg + fst + fa + seas) e(du)
g(fst + fa + seas) e(fst + seas)
g(veg + fst + fa + seas + fst*fa) e(fst)
g(fst + fa + dB) e(.)
g(fst + seas) e(fa + dB)
g(fst + seas + dB) e(dB)
g(veg + fst + du + dB) e(seas)
g(veg + du + dB) e(.)
g(fst + seas) e(seas + dB)
g(veg + fst + du + dB) e(veg)
g(fst) e(du + dB)

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g(veg + fst) e(fa)
g(veg + fst + du) e(veg + fa)
g(fst + fa + seas + fst*fa) e(fa + dB)
g(veg + fst + dB) e(fst)
g(fst + x) e(fst)
g(fst + fa + seas) e(veg)
g(fst + seas) e(fst + du + dB)
g(fst + du + seas + dB) e(veg + fst)
g(fst + seas + dB) e(fst + du)
g(veg + fst + fa + seas + fst*fa) e(fa)
g(fst) e(veg)
g(fst + du) e(seas)
g(veg + fst + fa) e(fst + seas)
g(veg + fst + fa) e(veg + seas)
g(veg + fst) e(du + dB)
g(fa) e(dB)
g(veg + fst) e(veg + dB)
g(veg + fst + du) e(du + seas)
g(veg + fst + du) e(fa + seas)
g(veg + du + fa) e(seas)
g(veg + fst + du + fa) e(fa)
g(fst) e(veg + fst + seas)
g(fst + seas) e(fst + du + fa)
g(veg + fa + seas) e(du)
g(fst + du + seas) e(veg + fst + seas)
g(veg + du) e(veg + du)
g(veg + fst + du + fa) e(fst + seas)
g(fst + du + seas) e(veg + fst + fa)
g(veg + du + seas) e(veg + du + seas)
g(fst) e(fst + x)
g(.) e(fa)
g(veg + fst + fa) e(fa)
g(fst + seas) e(fst + du + seas)
g(.) e(dB)
g(veg + fst + seas) e(veg + fst + seas)
g(veg + fst + du + seas) e(veg + fst + du + seas)

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g(fst + du) e(dB)
g(fst) e(fst + fa)
g(veg + fst + du + fa) e(veg + du)
g(veg + fst + fa + seas + fst*fa) e(du)
g(fa) e(fst)
g(veg + fst) e(seas + dB)
g(veg + fst + du + seas) e(veg + du + dB)
g(seas) e(du + dB)
g(veg + fst + seas + dB) e(du)
g(fst + fa + seas) e(veg + fst + dB)
g(veg + fst + fa) e(veg)
g(.) e(fst)
g(fst + du + fa + fst*fa) e(fst)
g(veg + fst) e(veg + seas + dB)
g(seas) e(du + seas)
g(veg + fst + fa + seas + fst*fa) e(seas)
g(veg + fst + du + fa + seas) e(dB)
g(seas) e(du + fa)
g(veg + dB) e(.)
g(veg + fst + seas) e(du + seas)
g(fst + du + fa + fst*fa) e(fa)
g(veg + fa) e(du)
g(fst + fa + seas + fst*fa) e(du + dB)
g(du + seas) e(du)
g(veg + seas + dB) e(veg)
g(veg + fst) e(fst + x)
g(fst + fa) e(du + fa)
g(seas) e(fst + du)
g(veg + dB) e(veg + seas + dB)
g(veg + fa + seas) e(seas)
g(veg) e(dB)
g(veg + fst + du + seas) e(veg + fst + seas)
g(veg + fst + fa + seas) e(veg)
g(veg + du + fa) e(veg + seas)
g(veg + fa) e(fa)
g(fst + fa) e(du + dB)

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g(veg + fa + seas) e(fa)
g(fst + fa + seas + fst*fa) e(fst + du)
g(veg + fst + fa + seas) e(veg + fst)
g(veg + fst + seas) e(seas + dB)
g(fst + du + fa + seas) e(dB)
g(fst + fa + seas + fst*fa) e(du + fa)
g(seas + dB) e(fst)
g(veg + seas + dB) e(veg + dB)
g(veg + du + dB) e(veg + du + seas + dB)
g(fst + du + fa + fst*fa) e(seas)
g(fst + du + fa + seas + fst*fa) e(fst)
g(veg + fst + du + fa) e(veg + fst + du + seas)
g(fst + fa + seas) e(veg + fst + fa)
g(fst + fa + seas) e(du + dB)
g(veg) e(fa)
g(veg + fst + fa + dB) e(.)
g(.) e(du + seas)
g(fst + fa + seas + fst*fa) e(fst + x)
g(veg + du + seas + dB) e(veg)
g(fst + fa + dB) e(fst)
g(veg + fst + du + seas) e(seas + dB)
g(veg + du + dB) e(veg)
g(fst + fa) e(du + seas)
g(fst + fa) e(fst + x)
g(veg + fst + fa + seas) e(seas)
g(veg + fst + du + fa) e(veg + fst + seas)
g(fst + fa + seas + fst*fa) e(veg)
g(veg + fst + du + fa + dB) e(.)
g(fst + fa + seas + dB) e(veg + fst)
g(veg + fst + fa + seas) e(fa)
g(veg + fst + du + fa + fst*fa) e(dB)
g(fst + fa + seas + fst*fa) e(veg + fst)
g(veg + fa + seas + dB) e(.)
g(seas + dB) e(seas)
g(veg + fst + seas) e(veg + fst + dB)
g(fst + du) e(fst + seas)

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g(veg + fst) e(fst + fa)
g(fa + seas) e(veg)
g(veg + fst + du + fa + seas) e(veg)
g(veg + fst + fa + seas + dB) e(.)
g(du + seas) e(dB)
g(seas + dB) e(fa)
g(veg + seas) e(du + seas)
g(fst + du + fa + fst*fa) e(dB)
g(veg + fa + seas) e(veg)
g(fst + du + fa + seas + fst*fa) e(dB)
g(du + seas) e(seas)
g(veg) e(fst)
g(veg + seas) e(veg + dB)
g(veg + fst + seas) e(fa + dB)
g(fst + seas) e(veg + du)
g(veg + fst + du + fa + fst*fa) e(fa)
g(veg + fst + du) e(veg + du + fa)
g(fst + fa + seas + fst*fa) e(fst + seas)
g(veg + fst + seas) e(du + fa)
g(du + seas) e(fa)
g(veg + fst + fa) e(fst + du)
g(veg + du) e(fa)
g(veg + fa) e(veg + seas)
g(veg + fst + dB) e(seas)
g(fst + fa + seas) e(veg + fst + du)
g(veg + fst + seas + dB) e(veg + fst)
g(veg + fst) e(fst + du + seas)
g(veg + fa + seas) e(dB)
g(du + seas) e(fst)
g(veg + du) e(dB)
g(veg + du + fa + dB) e(veg + du + seas)
g(veg + fst + dB) e(du)
g(veg + du + dB) e(veg + seas + dB)
g(fst + du + fa) e(dB)
g(veg + fst + du) e(fa + dB)
g(fst + x) e(du)

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$g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{du}) e(\text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{fst}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(.)$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fa})$
 $g(\text{fst} + \text{du}) e(\text{du})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst}) e(\text{seas} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{seas})$

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g(fst + seas) e(fst + fa + dB)
g(veg + fa + seas) e(fst)
g(veg + fst + seas) e(veg + fst + du)
g(fst + seas + dB) e(fa)
g(fst + du + seas) e(veg + dB)
g(veg + seas) e(du + dB)
g(fst + fa + seas + fst*fa) e(seas + dB)
g(fst + seas) e(fst + seas + dB)
g(veg + fst + fa + fst*fa) e(fst + seas)
g(veg + fst + fa) e(fst + fa)
g(fst + du + fa + seas + fst*fa) e(fa)
g(fst + fa + seas + dB + fst*fa) e(dB)
g(veg + fst + seas) e(veg + du)
g(fa) e(du + fa)
g(veg + fst + seas) e(veg + fa)
g(fst + seas) e(fa + seas)
g(fst + seas + dB) e(veg)
g(veg + fst + du + fa + seas) e(seas)
g(veg + du + dB) e(veg + fst + dB)
g(veg + fst + du + fa) e(veg + fst)
g(veg + fst + du) e(veg + fst + du + fa + seas)
g(veg + fst + seas) e(veg + fst + fa)
g(veg + seas) e(veg + fst)
g(veg + fst + du) e(veg + fst + dB)
g(fst + fa) e(fa + dB)
g(veg + fst + du + dB) e(fst + seas)
g(veg + dB) e(veg + seas)
g(fst + seas) e(veg + fst + fa + dB)
g(fst + seas) e(veg + fst + seas + dB)
g(veg + fst + du) e(veg + fst + seas + dB)
g(fst + fa + seas) e(du + fa)
g(fa) e(du + seas)
g(fst + fa + seas + dB + fst*fa) e(fst)
g(veg + dB) e(seas)
g(veg + fst + du + fa + fst*fa) e(veg + seas)
g(veg + fst + du + fa) e(veg + seas + dB)

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g(veg + seas) e(du + fa)
g(veg + fst + fa) e(veg + fst + seas)
g(veg + fst + fa + fst*fa) e(du + seas)
g(fst + seas) e(fst + fa + seas)
g(fst + fa + dB + fst*fa) e(fa)
g(fst + seas) e(veg + fa)
g(veg + seas) e(veg + du)
g(veg + seas) e(veg + fa)
g(fst + seas) e(veg + seas)
g(fst + fa + seas) e(fa + dB)
g(veg + fst + seas + dB) e(fst + du)
g(fa + seas + dB) e(dB)
g(veg + fst + fa) e(veg + fst)
g(veg + fst + fa + fst*fa) e(seas + dB)
g(fst + seas + dB) e(veg + fst + du)
g(fst + fa + seas) e(veg + dB)
g(veg + du + seas + dB) e(veg + du + seas)
g(veg) e(seas + dB)
g(seas) e(seas + dB)
g(veg + seas) e(fst + du)
g(fst + du + dB) e(.)
g(veg + fst + du) e(veg + fst + du + seas + dB)
g(seas) e(fa + dB)
g(veg + fst + du + fa) e(veg + dB)
g(fst + du) e(fa)
g(veg + fst + dB) e(veg + seas)
g(.) e(veg)
g(veg + fa + dB) e(.)
g(fst + fa + dB + fst*fa) e(fst)
g(fst + seas + dB) e(veg + fst + dB)
g(fst + du + fa + seas) e(fa)
g(veg + fst + du) e(fst + seas + dB)
g(seas) e(fst + x)
g(veg + fa + dB) e(veg + dB)
g(seas + dB) e(veg)
g(fst + du + fa + fst*fa) e(du)

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{veg}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas})$
 $g(\text{du}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{seas}) e(\text{fst} + \text{seas})$
 $g(\text{fst}) e(\text{veg} + \text{dB})$
 $g(\text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{seas}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{dB})$

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g(veg + seas + dB) e(seas)
g(veg + du) e(veg + seas + dB)
g(du + fa + seas + dB) e(.)
g(veg + fst + du + fa) e(fst + fa)
g(veg + fst + fa + seas) e(fst + seas)
g(veg + fst + seas) e(fst + du + dB)
g(fst + fa + seas + fst*fa) e(du + seas)
g(fa + seas + dB) e(du)
g(fst + seas) e(veg + fst + du + fa)
g(veg + fa) e(dB)
g(veg + fst) e(veg + fa + seas)
g(veg + fst + fa + fst*fa) e(fa + dB)
g(fa + seas) e(du + fa)
g(fst + seas) e(veg + fst + du + seas)
g(veg + fst + fa) e(du + dB)
g(veg + fst + du + dB) e(veg + fst + seas)
g(veg + fst + du) e(veg + fst + fa + seas)
g(veg + fa) e(du + seas)
g(fst + du + fa) e(fst + seas)
g(veg + fst + fa + seas) e(fst + x)
g(fa) e(fa + seas)
g(veg + fst + du + seas) e(veg + du + fa)
g(veg + fst + seas) e(fst + du + seas)
g(veg + fst + du) e(fst + fa + seas)
g(veg + seas) e(seas + dB)
g(veg + fst + du + fa + seas + dB) e(.)
g(fst + fa + dB) e(du)
g(veg + fst + du + fa + seas + fst*fa) e(dB)
g(veg + fst + du + dB) e(veg + fst)
g(veg + fst + du + dB) e(veg + dB)
g(veg + du) e(veg + du + fa + seas)
g(fst + fa + seas + dB + fst*fa) e(fa)
g(veg + fst + du + seas) e(veg + fst + du + fa)
g(veg + du) e(seas + dB)
g(veg + fst + du + seas + dB) e(seas)
g(veg + fst + fa) e(seas + dB)

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$g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{du})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst})$
 $g(\text{du} + \text{seas}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{dB}) e(\text{seas})$
 $g(\text{seas}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{dB}) e(\text{du})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{fst})$

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$g(\text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + x)$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(.)$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(.)$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(.)$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{seas}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fa})$
 $g(\text{fst} + \text{du}) e(\text{fst} + x)$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{du})$
 $g(\text{seas}) e(\text{veg} + \text{du})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{seas})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{du})$
 $g(\text{fst}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{du} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(.)$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(.)$

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$g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(.)$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + x)$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{seas})$
 $g(\text{veg}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst})$
 $g(\text{veg}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(.)$
 $g(\text{du} + \text{dB}) e(.)$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{fst}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(.)$
 $g(\text{fst} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$

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g(veg + fst + du + fa + fst*fa) e(seas + dB)
g(veg + fst + seas + dB) e(fst + fa)
g(veg + fst + du + fa) e(fst + du)
g(fst + du + fa + seas) e(fst + du)
g(fa + seas) e(du + dB)
g(veg + fst) e(fst + seas + dB)
g(veg + fst + du + fa) e(veg + fa + seas)
g(veg + fst + du + fa + seas + fst*fa) e(fa)
g(veg + fst + dB) e(dB)
g(veg + fst) e(veg + fst + dB)
g(veg + fst + du + fa + dB) e(veg + seas)
g(.) e(seas + dB)
g(veg + fst + du + fa + fst*fa) e(du)
g(veg + fst) e(fa + dB)
g(veg + fst + du + fa + seas + fst*fa) e(seas)
g(fa + seas) e(du + seas)
g(veg + fst + du) e(du + fa)
g(veg + fst + du + seas) e(du + fa)
g(veg + fst + dB) e(veg + dB)
g(fst + du) e(veg + fst + seas)
g(veg + fst + fa + seas + fst*fa) e(veg)
g(.) e(fa + seas)
g(veg + fst + dB) e(veg + fst)
g(veg + fst + du + fa + fst*fa) e(veg)
g(veg + fa) e(fa + seas)
g(veg + fst + du + fa + fst*fa) e(fst + seas)
g(.) e(du + fa)
g(seas) e(veg + fa)
g(veg + fst + fa) e(veg + dB)
g(.) e(fst + seas)
g(seas) e(veg + seas)
g(veg + du + fa + seas) e(fa)
g(du + seas + dB) e(dB)
g(veg + fst + fa) e(fa + seas)
g(fst + fa + seas + fst*fa) e(veg + dB)
g(veg + fst + fa) e(fa + dB)

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g(veg + seas) e(fst + fa)
g(veg + fst + seas) e(fst + seas + dB)
g(fa + seas + dB) e(fst)
g(fa + seas) e(fa + dB)
g(veg + fst) e(veg + fst + seas + dB)
g(veg + fst + du + dB) e(veg + fst + du)
g(veg + fst + du + seas) e(veg + fa + seas)
g(veg + fst + du + fa + dB) e(veg + du + seas)
g(fst + x) e(fst + seas)
g(veg + fst + du + fa) e(fa + dB)
g(fst + x) e(dB)
g(fa) e(fa + dB)
g(veg + fst + du + fa + dB) e(seas)
g(veg + fst + du) e(veg + du + fa + seas + dB)
g(veg + fst + du + fa + seas) e(fst + seas)
g(du + fa + seas) e(du)
g(veg + du + dB) e(veg + du + dB)
g(veg + fst + fa + dB) e(seas)
g(veg + fst + du + seas + dB) e(veg + seas)
g(fa + seas) e(fst + du)
g(veg + du + dB) e(veg + fst + seas + dB)
g(seas + dB) e(du + dB)
g(fst + fa) e(fst + fa + seas)
g(.) e(du + dB)
g(veg + fst + dB) e(du + seas)
g(veg + fst) e(fst + fa + seas)
g(veg + fst + fa + fst*fa) e(fst + du)
g(veg + fst + dB) e(veg + fst + seas)
g(veg + fa + dB) e(veg + seas + dB)
g(fst + fa) e(veg + dB)
g(fa + seas + dB) e(seas)
g(fst + du + fa + fst*fa) e(fst + seas)
g(veg + fst + fa + dB) e(du)
g(.) e(fst + du)
g(fst) e(du + seas + dB)
g(fst + fa + dB) e(seas)

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g(fst + seas) e(veg + fa + dB)
g(veg + fst + seas) e(fst + fa + dB)
g(fst + fa + seas + dB + fst*fa) e(seas)
g(veg + fst + fa) e(fst + du + seas)
g(fa) e(seas + dB)
g(veg + fst + du + seas) e(veg + du + fa + seas)
g(veg + fst + du + fa + seas) e(veg + du + seas)
g(veg + fst + fa + seas) e(veg + dB)
g(veg + dB) e(du)
g(du) e(du)
g(veg + dB) e(veg + fst + dB)
g(fst + du + fa + seas) e(veg)
g(fst + fa + seas) e(fst + du + dB)
g(veg + du + seas + dB) e(veg + du + dB)
g(fst + fa + seas + fst*fa) e(fst + du + fa)
g(fst + fa + dB) e(fa)
g(fst + seas) e(veg + seas + dB)
g(du + fa + seas) e(dB)
g(fa + seas) e(fst + fa)
g(fa + seas) e(fa + seas)
g(veg + seas + dB) e(veg + seas)
g(veg + fst + du + fa + fst*fa) e(fa + seas)
g(fst + fa) e(veg + fst + dB)
g(veg + fst + fa + seas + fst*fa) e(du + dB)
g(veg + fst + du + fa) e(veg + du + dB)
g(veg + fst + du + fa + seas) e(fst + fa)
g(fst) e(fst + seas + dB)
g(du + fa + seas) e(seas)
g(veg + fst) e(fst + du + dB)
g(veg + fst + du + fa) e(du + seas)
g(veg + fst + du + fa + seas) e(fst + x)
g(veg + du + seas + dB) e(du)
g(veg + fst + fa + seas) e(veg + seas)
g(veg + du + fa + seas) e(dB)
g(fa) e(fst + seas)
g(veg + fst + seas) e(fst + fa + seas)

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst})$
 $g(\text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{fa}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{seas})$
 $g(\text{veg}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst})$
 $g(\text{fst}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{du} + \text{fa})$
 $g(\text{fst}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$

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$g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{du})$
 $g(\text{du} + \text{fa}) e(\text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{fst}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{du} + \text{seas} + \text{dB})$

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$g(\text{fst} + \text{du}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fa} + \text{seas}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{du})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{fst})$
 $g(\text{veg}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{x})$
 $g(\text{du}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(.)$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{fst} + x) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{du}) e(\text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{du}) e(\text{fst})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{fst})$
 $g(\text{fst} + x) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du})$

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g(fst + fa) e(du + seas + dB)
g(veg + fst + fa + seas + fst*fa) e(du + seas)
g(veg + seas) e(veg + fa + seas)
g(fst + du + fa + seas) e(veg + fst + seas)
g(fst + du + seas + dB) e(fst + seas)
g(fst + du + seas + dB) e(fst + du)
g(veg + fst + du + fa) e(du + dB)
g(fst + du + seas + dB) e(seas)
g(veg + seas) e(veg + du + seas)
g(fst + fa + seas + dB + fst*fa) e(fst + fa)
g(veg + fst + seas) e(veg + fa + seas)
g(fst + du + seas + dB) e(fa)
g(fst + du + seas) e(fa + seas)
g(veg + fst + fa) e(fst + du + fa)
g(veg + dB) e(du + seas)
g(veg + du + seas) e(fa + dB)
g(du + seas + dB) e(du)
g(fst + seas + dB) e(du + fa)
g(veg + fa + seas) e(du + seas)
g(veg + fst + du + fa + dB) e(dB)
g(veg + fst + fa + seas + fst*fa) e(fa + seas)
g(veg + fst + seas) e(veg + du + seas)
g(fst + seas + dB) e(du + seas)
g(fst + fa + seas) e(veg + du)
g(veg + du + seas) e(fst + x)
g(du + seas + dB) e(fst)
g(fst + du + fa) e(fa + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(fst)
g(du + fa) e(fst)
g(veg + fa + seas) e(du + fa)
g(fst + fa + dB + fst*fa) e(fst + seas)
g(dB) e(fa)
g(veg + du + fa) e(fa + seas)
g(seas + dB) e(du + fa)
g(veg + du + seas) e(du + dB)
g(veg + fst + du) e(fst + du + fa)

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g(seas + dB) e(du + seas)
g(fst + du + seas) e(fst + fa + seas)
g(fst + du + seas) e(fst + du + fa)
g(fst + x) e(veg + fst + seas)
g(seas + dB) e(fa + dB)
g(fst + fa + dB + fst*fa) e(du + fa)
g(fst + du + fa + fst*fa) e(du + fa)
g(fst + du + seas) e(fst + du + seas)
g(fst + fa + seas + fst*fa) e(veg + fa)
g(veg + fst + fa + fst*fa) e(fst + fa + seas)
g(veg + dB) e(dB)
g(seas + dB) e(fst + du)
g(fst + fa + seas) e(fst + seas + dB)
g(veg + fst + du + fa + dB + fst*fa) e(seas)
g(veg + dB) e(veg + fa + dB)
g(fst + fa + seas) e(veg + fa)
g(fst + seas) e(du + fa + seas)
g(du + seas + dB) e(seas)
g(veg + fst + fa + dB + fst*fa) e(veg + dB)
g(fst) e(veg + fst + du + seas)
g(veg + dB) e(veg + du + dB)
g(fst + du) e(du + seas)
g(fst + du) e(veg + dB)
g(du + seas + dB) e(fa)
g(fst) e(du + fa + dB)
g(veg + fst + fa + dB) e(dB)
g(fst + fa + seas + dB) e(fst + x)
g(seas + dB) e(seas + dB)
g(veg + fst + fa + dB + fst*fa) e(dB)
g(seas + dB) e(fst + x)
g(fst + du) e(veg + fst + du)
g(veg) e(du + seas + dB)
g(dB) e(fst)
g(veg + fst + fa + seas + dB + fst*fa) e(dB)
g(veg + du + seas + dB) e(veg + du + seas + dB)
g(fst + du) e(veg + fst + fa)

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$g(\text{fst}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{x}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{veg}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{seas})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{fst}*\text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(.) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst}*\text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa}) e(\text{du} + \text{seas})$
 $g(\text{fst}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{du})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$

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g(fst + du + fa + fst*fa) e(veg)
g(fst + du) e(fa + seas)
g(fst + fa + dB + fst*fa) e(du + dB)
g(veg + fst + fa + dB) e(fst + du)
g(fst + du + seas + dB) e(veg + fst + seas)
g(veg + du + fa) e(seas + dB)
g(veg + seas + dB) e(du + dB)
g(fst + fa + seas + fst*fa) e(fst + du + seas)
g(fst + du + seas + dB) e(veg + fst + fa)
g(veg + fst + dB) e(fst + du + seas)
g(veg + fst + du + fa + seas) e(veg + fst + seas)
g(veg + fst + fa) e(veg + du + seas)
g(veg + fst + fa + fst*fa) e(du + fa + seas)
g(veg + fst + fa + seas) e(veg + fst + dB)
g(veg + fst + du + seas) e(veg + du + fa + dB)
g(veg + fst + seas) e(veg + fst + du + seas)
g(veg + fst + du + fa) e(fst + du + seas)
g(fa + seas) e(veg + fa)
g(veg + fst) e(veg + du + dB)
g(fst + du + fa + seas + fst*fa) e(fst + seas)
g(veg + dB) e(veg + fst + seas + dB)
g(veg + fa + dB) e(fa)
g(veg + fa + seas) e(fa + seas)
g(.) e(fa + dB)
g(fst + du + fa + fst*fa) e(fst + du)
g(fst) e(veg + fst + fa + seas)
g(veg + fst + du + fa + dB) e(veg + dB)
g(veg + fst + du + fa + fst*fa) e(veg + du)
g(veg + du + dB) e(seas + dB)
g(veg + fst + du) e(du + fa + seas)
g(fa + seas) e(veg + dB)
g(veg + fst + du + fa + fst*fa) e(veg + seas + dB)
g(fst + du) e(fa + dB)
g(fst + fa + dB + fst*fa) e(fa + seas)
g(fst + fa + seas + fst*fa) e(veg + fst + dB)
g(veg + du + seas) e(veg + fst + du + seas)

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$g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fa}) e(\text{du} + \text{dB})$
 $g(.) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$

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g(fst + fa + seas) e(veg + fst + du + dB)
g(veg + fst + fa + seas + dB) e(veg + fst)
g(veg + fst + du + seas) e(veg + fst + seas + dB)
g(.) e(fst + x)
g(fst + seas + dB) e(veg + dB)
g(veg + fst + fa + seas + fst*fa) e(veg + seas)
g(veg + fst + fa) e(veg + du)
g(veg + fst) e(fa + seas + dB)
g(veg + fa + seas) e(seas + dB)
g(fst + du + dB) e(dB)
g(veg + fst + du + seas + dB) e(veg + fst + du + seas)
g(seas) e(du + seas + dB)
g(seas) e(du + fa + dB)
g(veg + fst + du + fa + fst*fa) e(fst + x)
g(veg + fst + du + fa) e(veg + du + fa)
g(veg + dB) e(fa)
g(veg + fst + fa + seas + dB) e(seas)
g(veg + fst + fa + fst*fa) e(veg + dB)
g(veg + fst + du + fa + seas + fst*fa) e(fa + dB)
g(veg + fst + fa) e(fst + du + dB)
g(fst + fa + dB) e(du + fa)
g(veg + fa + dB) e(dB)
g(veg + fst + du + fa) e(veg + fst + seas + dB)
g(seas) e(fst + du + dB)
g(fst + fa + seas + dB + fst*fa) e(du + dB)
g(fa + seas) e(veg + fst)
g(veg + fst + seas + dB) e(du + fa)
g(fst + fa + seas) e(veg + fst + seas + dB)
g(veg + fst + fa + seas) e(fa + seas)
g(veg + fst) e(fst + fa + dB)
g(fa + seas + dB) e(fa + dB)
g(veg + dB) e(fst)
g(seas) e(du + fa + seas)
g(veg + fst) e(veg + du + seas + dB)
g(veg + du + seas + dB) e(veg + fst + dB)
g(veg + fst + seas + dB) e(fst + x)

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$g(\text{fa} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{du} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg}) e(\text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fa} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas}) e(\text{du} + \text{seas})$
 $g(\text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas}) e(\text{du} + \text{fa})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{fa})$

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g(veg + fst + fa + seas + fst*fa) e(veg + dB)
g(fst + fa + seas + dB) e(veg + fst + fa)
g(fst + du + fa + seas + fst*fa) e(seas + dB)
g(fst + du + fa + dB + fst*fa) e(fa)
g(fst + x) e(veg + fst + du)
g(veg + fst) e(fst + du + seas + dB)
g(veg + fst + du + fa + dB) e(veg + seas + dB)
g(fst + fa + dB) e(du + seas)
g(fst + x) e(veg + fst + dB)
g(fst + du + fa + seas + fst*fa) e(du + dB)
g(veg + fst + du + fa + dB) e(veg + fst + du + seas)
g(fst + fa + seas) e(veg + fst + fa + fst*fa)
g(fst + fa + seas + fst*fa) e(veg + seas)
g(veg + fa) e(fst + du)
g(veg + fst + du + fa) e(veg + fst + du + seas + dB)
g(veg + fst + fa + seas) e(veg + fa)
g(du + dB) e(seas)
g(veg + fa + seas) e(fst + seas)
g(veg + seas + dB) e(veg + du + dB)
g(veg + fst + fa + seas) e(veg + fst + du)
g(veg + du + fa) e(veg + fst + seas)
g(veg + fst + seas) e(veg + fst + fa + fst*fa)
g(fst + du + dB) e(fst + seas)
g(veg + fst + du + seas + dB) e(veg + fst + seas)
g(veg + fst + du + fa + fst*fa) e(veg + fst + du + seas)
g(du + seas + dB) e(veg)
g(fst + du + fa + seas + fst*fa) e(fst + du)
g(fst + du + fa + dB + fst*fa) e(dB)
g(veg + seas + dB) e(veg + fa)
g(veg + fst + fa + seas) e(fst + du + fa)
g(veg + seas + dB) e(veg + du)
g(du + seas) e(fst + du)
g(veg + dB) e(veg + du + seas + dB)
g(veg + dB) e(veg + fa + seas + dB)
g(veg + fst + fa + dB) e(fst + fa)
g(veg + du + seas + dB) e(veg + fst + du)

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g(fst + du + fa) e(du + seas)
g(fst + x) e(fst + du + seas)
g(veg + fst + du + fa) e(veg + fst + dB)
g(veg + du + fa) e(veg + fa + seas)
g(veg + fa + seas) e(fst + fa)
g(fst + du) e(fst + du + seas)
g(veg) e(fst + x)
g(veg + fst + fa + seas) e(veg + du)
g(veg + fa) e(fst + fa)
g(veg + fst + du + seas) e(veg + fst + fa + seas)
g(veg + fst + fa + seas) e(veg + fst + fa)
g(veg + du + seas + dB) e(veg + du + fa)
g(veg + seas) e(du + seas + dB)
g(fst + du + fa) e(veg + fst + fa)
g(seas + dB) e(fst + seas)
g(veg + du + fa) e(veg + seas + dB)
g(veg + fst + du + fa + seas + fst*fa) e(fst + fa)
g(fst) e(veg + seas + dB)
g(.) e(veg + du)
g(fst + du + seas + dB) e(fst)
g(fst + du) e(fst + seas + dB)
g(seas + dB) e(veg + fst)
g(fa + dB) e(du + seas)
g(fst + du + fa + seas) e(seas + dB)
g(veg + fst + du + fa + dB) e(veg + du + seas + dB)
g(veg + du + fa + dB) e(veg + fst + du + seas)
g(seas + dB) e(fst + fa)
g(fst + fa + seas + dB + fst*fa) e(fst + du)
g(fst + fa + dB) e(fst + x)
g(veg + fa + seas + dB) e(fst)
g(fst + fa + seas + dB + fst*fa) e(veg + fst)
g(.) e(du + seas + dB)
g(veg + fst + fa + seas + fst*fa) e(veg + fst)
g(fst + fa + seas) e(du + seas + dB)
g(veg + fst + seas) e(fa + seas + dB)
g(veg + fst + du + fa) e(veg + fst + du + fa + seas)

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$g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(.) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{du} + \text{fa})$
 $g(\text{du}) e(\text{du} + \text{seas})$
 $g(.) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{du}) e(\text{veg})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$

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g(veg + fa + seas) e(veg + fst)
g(dB) e(veg)
g(veg + du + fa + dB) e(dB)
g(veg + fst + du + fa + fst*fa) e(veg + dB)
g(veg + du) e(fa + dB)
g(fst) e(fst + du + seas + dB)
g(veg + du + seas + dB) e(veg + fa)
g(veg + fst + du + seas + dB) e(seas + dB)
g(veg + fst + fa + dB + fst*fa) e(fst + seas)
g(veg + du + dB) e(veg + fst)
g(veg + fa) e(veg + seas + dB)
g(veg + du + dB) e(veg + fa)
g(du + seas) e(seas + dB)
g(fa + seas) e(veg + seas)
g(veg + du + dB) e(veg + du + fa)
g(veg + fst + du + fa + seas) e(veg + fa)
g(fst + du) e(fst + fa + seas)
g(veg + fst + dB) e(du + fa)
g(veg + fst + fa) e(veg + fst + dB)
g(veg + fst + du + fa + dB) e(du)
g(veg + fa + dB) e(veg + fa + dB)
g(veg + fa + dB) e(veg + fst + dB)
g(seas + dB) e(fa + seas)
g(du + seas) e(fa + dB)
g(veg + fst + du + fa + fst*fa) e(du + dB)
g(fst + fa + seas + dB + fst*fa) e(veg)
g(veg + fst + du + fa + dB) e(veg + fst + seas)
g(veg + du) e(fst + x)
g(veg + fst + fa + seas) e(fst + du + dB)
g(veg + du + fa + seas + dB) e(veg + du)
g(veg + seas) e(du + fa + seas)
g(veg + fst + du + fa + dB + fst*fa) e(dB)
g(veg + fst + seas) e(veg + fst + fa + dB)
g(veg + du + fa + seas + dB) e(veg + du + seas)
g(veg + fst + seas + dB) e(veg + fst + du)
g(veg + fst + du + fa + seas + dB) e(veg)

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$g(\text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{fa})$

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$g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{x})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{seas})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{seas})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(.) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$

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$g(\text{du} + \text{fa} + \text{dB}) e(\text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{x}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$

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g(veg + fst + fa + dB + fst*fa) e(fst + fa + dB)
g(fa + dB) e(seas + dB)
g(veg + fst + fa + seas + dB) e(fst + seas)
g(fst + seas + dB) e(fa + seas)
g(dB) e(seas + dB)
g(fst + seas) e(fst + fa + seas + dB)
g(veg + fst + du + dB) e(fst + du + seas)
g(fst + du + seas) e(veg + seas + dB)
g(veg + fst + fa + seas) e(fst + fa + dB)
g(veg + fa + seas + dB) e(dB)
g(veg + fst + du + fa + fst*fa) e(veg + du + seas + dB)
g(fst + seas) e(fst + fa + seas + fst*fa)
g(veg + dB) e(fst + seas)
g(veg + fst + du + fa) e(veg + fa + dB)
g(veg + fst + fa) e(veg + fst + fa + seas)
g(fst + du + fa + dB) e(veg + fst)
g(fst + fa) e(veg + fa + dB)
g(veg + fst + du + dB) e(veg + fst + du + fa + seas)
g(fst + du + fa + seas) e(du + fa)
g(fa) e(du + seas + dB)
g(fst + du + fa + seas + dB + fst*fa) e(fa)
g(veg + fst + fa + fst*fa) e(veg + fa)
g(veg + fst + du + seas + dB) e(veg + du + seas + dB)
g(veg + fst + du + fa + seas) e(du + seas)
g(veg + fst + fa + dB + fst*fa) e(fst + fa)
g(veg + fst) e(veg + fst + fa + seas + fst*fa)
g(veg + fa + dB) e(seas + dB)
g(veg + fst + du + fa + dB) e(fst + fa)
g(fa) e(veg + du)
g(fst + seas + dB) e(veg + fa)
g(du + fa) e(du + fa)
g(veg + du + fa + seas + dB) e(seas)
g(veg + fst + seas) e(veg + du + fa)
g(veg + fst + fa + seas + dB + fst*fa) e(fa + dB)
g(fst + seas + dB) e(veg + seas)
g(fa) e(fst + du + fa)

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$g(\text{fst} + \text{fa} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(.) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(.) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa}) e(\text{veg})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa})$
 $g(\text{fst}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{du} + \text{seas})$

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g(veg + fst + du + fa + dB + fst*fa) e(veg + seas)
g(fa) e(fst + du + seas)
g(fst + fa) e(veg + fst + seas + dB)
g(veg + fst + seas + dB) e(fst + du + fa)
g(veg + fst + fa + seas) e(fst + seas + dB)
g(fst + fa + dB) e(veg + fst + seas)
g(veg + fst + du + fa + fst*fa) e(veg + fst + du)
g(veg + fst + fa + dB + fst*fa) e(fa + seas + dB)
g(veg + fst + du + fa + seas + fst*fa) e(fst + x)
g(veg + fst + fa + fst*fa) e(veg + fst + seas)
g(veg + fst + du) e(fst + du + seas + dB)
g(veg + fst + fa + dB + fst*fa) e(veg + fa + dB)
g(du + seas) e(veg + dB)
g(veg + seas) e(fst + du + fa)
g(veg + fst + seas) e(fst + du + seas + dB)
g(fst + seas) e(veg + fa + seas)
g(veg + fst + du + fa + seas) e(veg + fst + dB)
g(veg + fst + du) e(fst + fa + seas + fst*fa)
g(veg + fst + fa + fst*fa) e(veg + fa + seas)
g(veg + seas) e(veg + du + fa)
g(fst + fa + seas) e(fa + seas + dB)
g(fst + fa + seas + fst*fa) e(veg + fst + fa + fst*fa)
g(veg) e(fa + seas + dB)
g(fst + seas) e(veg + fst + du + fa + fst*fa)
g(fst + seas + dB) e(veg + fst + du + fa)
g(seas) e(fa + seas + dB)
g(veg + fst + dB) e(veg + du + seas)
g(veg + fst + du) e(veg + fst + fa + fst*fa)
g(fst + seas + dB) e(veg + fst + du + seas)
g(fa + seas + dB) e(fst + x)
g(fst + fa) e(fst + du + fa + dB)
g(fa + seas) e(du + fa + dB)
g(fa) e(veg + dB)
g(fst + fa) e(veg + fst + fa + dB)
g(fst + seas + dB) e(veg + fst + fa + dB)
g(veg + du) e(veg + fst + seas + dB)

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$g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{fa} + \text{seas})$
 $g(\text{veg}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{du}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa}) e(\text{du} + \text{seas} + \text{dB})$

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$g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{du}) e(\text{fst} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$

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$g(\text{veg} + \text{du}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{seas})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$

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g(seas) e(veg + fst + du)
g(veg + fst + du + seas + dB) e(fa + seas)
g(veg + fst + du + seas + dB) e(veg + fst + du + fa)
g(veg + fst + du + fa + seas) e(veg + fst + du + fa)
g(veg + fst + fa + fst*fa) e(fst + du + dB)
g(du + seas) e(veg + fa)
g(fst + du + fa + seas + dB) e(fst + fa)
g(veg + du) e(du + seas + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(fst + fa)
g(veg + fst + dB) e(fst + fa + seas)
g(fst + du + fa + seas) e(fst + fa + seas)
g(veg + dB) e(du + dB)
g(seas) e(veg + fa + dB)
g(veg + du + seas) e(veg + fst + dB)
g(dB) e(fa + seas)
g(veg + fst + du + fa + seas) e(veg + fst + fa)
g(fa + dB) e(fst + fa)
g(du + seas) e(veg + seas)
g(fst + fa + dB + fst*fa) e(du + fa + dB)
g(fst + fa + dB) e(veg + fst + dB)
g(fa + dB) e(du + dB)
g(veg + fst + du + fa + dB) e(veg + du + dB)
g(fa + dB) e(veg + dB)
g(veg + fst + dB) e(du + seas + dB)
g(veg + fst + du + fa + seas + fst*fa) e(veg + fst)
g(fst + du + fa + fst*fa) e(fst + du + fa)
g(veg + du) e(fst + fa + seas)
g(veg + du) e(du + fa + seas)
g(fst + du + fa + seas + fst*fa) e(veg + dB)
g(du + seas) e(veg + du)
g(fst + du) e(fst + du + dB)
g(veg + fst + dB) e(veg + fa)
g(fst + x) e(fst + du + fa)
g(du + fa) e(fa + dB)
g(fst + fa + seas + fst*fa) e(fst + du + fa + dB)
g(veg + du + fa + dB) e(du)

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$g(\text{du} + \text{dB}) e(\text{du})$
 $g(\text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{x}) e(\text{fa} + \text{seas})$
 $g(\text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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g(veg + du + seas) e(veg + fa + dB)
g(fst + du) e(fst + du + fa)
g(veg + fst + fa + dB) e(fst + du + seas)
g(fst + du + dB) e(fst + x)
g(veg + fst + du + fa) e(veg + du + fa + seas + dB)
g(veg + fst + du + seas + dB) e(veg + fst + fa)
g(du + fa) e(seas + dB)
g(veg + du + fa + seas + dB) e(fst)
g(fst + du + dB) e(veg + fst + seas)
g(veg + du + seas + dB) e(veg + fa + seas)
g(fst + du) e(veg + fst + seas + dB)
g(fst + du + dB) e(veg)
g(veg + fst + fa) e(fst + du + fa + seas)
g(veg + du + fa + dB) e(fst)
g(veg + fst + fa) e(veg + fa + dB)
g(fst + du + fa + fst*fa) e(du + fa + dB)
g(veg + seas + dB) e(fst + fa)
g(veg + fst + du + seas + dB) e(veg + fst + du + dB)
g(veg + fst + fa + fst*fa) e(veg + du)
g(fst + du + fa + seas + dB + fst*fa) e(du)
g(veg + fst + du + fa) e(fst + du + dB)
g(veg + du + fa) e(fst + fa)
g(veg + du + fa + seas) e(veg + fst)
g(seas) e(veg + fst + fa)
g(seas) e(veg + du + fa)
g(veg + fa + seas + dB) e(veg + seas)
g(veg + du + fa) e(du + fa)
g(fst + du + fa + seas + dB + fst*fa) e(seas)
g(du + seas + dB) e(veg + dB)
g(veg + du + fa + seas) e(seas + dB)
g(fst + du + seas + dB) e(fst + x)
g(fst + du + seas + dB) e(du + dB)
g(du + fa + dB) e(du)
g(seas) e(veg + fst + seas)
g(veg + du + seas + dB) e(veg + fst + seas)
g(fst + fa + seas) e(fst + du + fa + fst*fa)

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$g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$

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g(veg + fst + fa + seas + dB) e(dB)
g(veg + fa + dB) e(veg + fa + seas + dB)
g(fst + fa + seas) e(fst + du + fa + seas)
g(veg + fst + seas + dB) e(fst + seas + dB)
g(fst + du + fa + seas) e(fst + du + dB)
g(veg + du + seas + dB) e(fst + seas)
g(fst + fa + seas + dB + fst*fa) e(seas + dB)
g(veg + fst + fa + dB + fst*fa) e(veg)
g(veg + fst + fa + dB + fst*fa) e(fst + du)
g(veg + fst + du) e(veg + fst + du + fa + fst*fa)
g(du + dB) e(fa)
g(fst + du + fa + seas + fst*fa) e(fst + fa + dB)
g(veg + fst + fa + dB + fst*fa) e(du + dB)
g(veg + fst + seas + dB) e(fst + fa + seas)
g(fst + fa + seas + fst*fa) e(veg + du + dB)
g(veg + du + seas + dB) e(fa + seas)
g(veg + fst + du + fa + fst*fa) e(veg + du + fa + seas)
g(veg + du + fa + seas) e(du + seas)
g(veg + du + fa + seas) e(fst + seas)
g(fst + seas) e(veg + du + seas + dB)
g(veg) e(veg + du + seas + dB)
g(veg + fst + fa + seas + fst*fa) e(fst + du + seas)
g(veg + du + fa + seas) e(fa + dB)
g(veg) e(veg + fa + seas + dB)
g(veg) e(veg + fst + seas + dB)
g(fst + du) e(veg + du)
g(veg + fst + du + dB) e(veg + fst + du + fa)
g(veg + dB) e(veg + du)
g(fst + fa) e(fst + fa + seas + fst*fa)
g(veg + seas) e(fst + fa + dB)
g(veg + dB) e(veg + fa)
g(fa + seas) e(du + seas + dB)
g(fst + du + fa + seas + dB) e(fst + seas)
g(fst + du + seas) e(fa + seas + dB)
g(fst + fa) e(fst + fa + seas + dB)
g(veg + fst + du + fa) e(du + fa + seas)

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(.) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(.) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fst}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$

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$g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(.) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{seas})$
 $g(.) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{du} + \text{seas})$
 $g(.) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fa})$
 $g(.) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{du}) e(\text{du} + \text{fa})$
 $g(\text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{fa} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$

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$g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + x) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + x)$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + x) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + x) e(\text{veg} + \text{du})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$

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$g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{du}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du})$
 $g(\text{veg}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{du}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{x}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$

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$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(.)$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + x)$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + x)$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + x)$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{fst} + x)$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{seas})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

g(fst + seas + dB) e(seas + dB)
g(veg + fst) e(veg + fst + du + fa)
g(fst + fa + dB) e(du + fa + dB)
g(fst + du + fa + seas) e(veg + fst + seas + dB)
g(fst + du + fa + seas + fst*fa) e(veg + fst + fa)
g(fst + fa + dB + fst*fa) e(veg + fst)
g(veg + fst + du + dB) e(fa + seas + dB)
g(veg + fst + seas + dB) e(fa + dB)
g(.) e(veg + du + seas)
g(fst + du + fa + seas + dB + fst*fa) e(fa + dB)
g(seas + dB) e(veg + seas + dB)
g(veg + du + fa + seas) e(veg + fst + du)
g(fa + seas + dB) e(veg + dB)
g(veg + du + dB) e(veg + fst + fa + seas)
g(fst + du + fa + fst*fa) e(fst + fa + seas + fst*fa)
g(veg + fst + du + dB) e(fst + du + fa)
g(veg + fst + du + dB) e(du + seas + dB)
g(fst + du + dB) e(seas + dB)
g(veg + fst + du + dB) e(fst + du + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(dB)
g(veg + du + fa) e(veg + fst + du)
g(veg + du + seas) e(du + fa + seas)
g(veg + du + fa) e(veg + du + fa)
g(veg + fst + seas + dB) e(du + seas + dB)
g(veg + dB) e(veg + fst + fa + dB + fst*fa)
g(veg + fst + seas) e(du + fa + seas + dB)
g(veg + du + seas) e(fst + fa + seas)
g(veg + fa + seas) e(du + fa + seas)
g(veg + fst + du + fa + seas) e(veg + fa + dB)
g(fst) e(veg + fst + du + seas + dB)
g(fst + x) e(veg + fst + du + seas)
g(veg + fst + fa) e(fst + fa + seas + dB)
g(veg + fst + du + seas) e(fst + fa + dB + fst*fa)
g(veg + du + seas) e(fst + du + seas)
g(veg + fst + fa + fst*fa) e(veg + fa + dB)
g(fst + fa) e(fst + fa + dB + fst*fa)

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$g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{du} + \text{fa})$

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g(veg + fst + fa + dB) e(veg + fa + dB)
g(dB) e(veg + seas)
g(fst + du + dB) e(veg + fst + fa)
g(fa + seas) e(fst + seas + dB)
g(fst + du + fa + seas) e(veg + fst + fa + fst*fa)
g(veg + seas + dB) e(veg + du + seas + dB)
g(veg) e(veg + fst + du)
g(fa + seas + dB) e(veg + fa)
g(veg + fst + du + fa) e(veg + fst + fa + seas + fst*fa)
g(veg + fa + seas) e(du + fa + dB)
g(veg) e(veg + fst + fa)
g(fa + dB) e(du + fa + dB)
g(du) e(fa + dB)
g(fst + fa + seas + dB + fst*fa) e(fst + fa + seas)
g(fst + du + fa + seas + dB) e(veg + fst + fa)
g(veg + fst + du) e(fst + du + fa + dB)
g(veg + dB) e(veg + fst + fa + seas + dB + fst*fa)
g(du + fa + dB) e(fa + dB)
g(veg + seas) e(veg + fa + seas + dB)
g(veg + fst + fa + seas) e(veg + fst + du + seas)
g(veg + seas) e(veg + du + seas + dB)
g(veg + du + fa + dB) e(fa + dB)
g(veg + seas) e(veg + fst + seas + dB)
g(fst + du + seas) e(fst + fa + dB + fst*fa)
g(veg + fst + seas + dB) e(du + fa + dB)
g(du + fa + seas + dB) e(fa + dB)
g(fst + du + fa + dB) e(veg)
g(veg + seas + dB) e(veg + fa + seas + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(fa + seas)
g(fst + du + fa + seas + fst*fa) e(veg + fst + seas)
g(du) e(fst + fa)
g(veg + fst + seas + dB) e(veg + fa + dB)
g(veg + fst + seas + dB) e(veg + du + dB)
g(fa + seas + dB) e(du + fa + dB)
g(veg + fa + seas) e(du + seas + dB)
g(fst + du + fa + seas) e(veg + fst + fa + seas)

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$g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{fst} + x)$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + x) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du})$

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g(veg + fst + dB) e(veg + fa + seas + dB)
g(fst + fa + seas + fst*fa) e(veg + fst + fa + dB)
g(veg + fst + fa + dB) e(veg + fst + dB)
g(fst + du + seas) e(fst + du + seas + dB)
g(veg + du + fa + seas) e(veg + fst + seas)
g(veg + du + fa) e(fa + seas + dB)
g(veg + fst + du + fa + dB) e(fst + fa + seas)
g(du + fa) e(fst + x)
g(veg + fst + fa + seas + fst*fa) e(fst + du + fa + fst*fa)
g(veg + fst + fa + seas + fst*fa) e(veg + fst + seas)
g(veg + du + fa + dB) e(veg + fst + du)
g(fst + du) e(veg + fa + dB)
g(veg + du + fa + seas) e(veg + fa + seas)
g(veg + seas) e(veg + fst + fa + seas)
g(veg + seas) e(veg + fst + du + seas)
g(fst + fa + seas + dB) e(veg + du)
g(veg + fst + du + seas) e(veg + fst + fa + seas + fst*fa)
g(fst + du + fa + dB) e(fa + dB)
g(veg + fst + fa + seas) e(veg + fst + fa + seas)
g(fst) e(veg + du + seas + dB)
g(fst + fa + seas + fst*fa) e(fst + du + seas + dB)
g(fst + x) e(veg + fst + seas + dB)
g(du + seas + dB) e(fst + du)
g(fst) e(veg + fst + fa + seas + fst*fa)
g(du + seas + dB) e(du + seas)
g(fst + du + seas) e(fst + fa + seas + fst*fa)
g(fst + du + seas) e(fst + du + fa + fst*fa)
g(.) e(veg + seas + dB)
g(veg + fst + fa + seas + fst*fa) e(veg + fa + dB)
g(fst + fa + dB + fst*fa) e(veg + fst + fa + dB)
g(du + seas + dB) e(du + fa)
g(fst + fa + seas + fst*fa) e(veg + fa + seas)
g(fa + seas + dB) e(veg + du)
g(veg + fa + seas + dB) e(veg + fst + dB)
g(veg + du + fa + dB) e(veg + du + fa)
g(fst + du + seas + dB) e(fst + du + fa)

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$g(\text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{veg})$
 $g(\text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$

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$g(\text{fst} + \text{du}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$

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$g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$

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$g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(.) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa})$

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$g(\text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$

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$g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$

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$g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(.) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$

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$g(\text{fst} + \text{du} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(.) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(.) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{du}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$

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$g(\text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + x) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + x)$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

g(veg + seas) e(du + fa + seas + dB)
g(.) e(du + fa + seas + dB)
g(seas + dB) e(fst + fa + seas)
g(veg + du + fa + seas + dB) e(veg + du + fa)
g(veg + fa + seas) e(veg + fst + fa)
g(veg + dB) e(fa + seas + dB)
g(fst + fa + seas + fst*fa) e(veg + fst + du + seas)
g(veg + fst + du + fa + fst*fa) e(veg + fst + du + fa + seas)
g(veg + fa + dB) e(du + fa + seas)
g(veg + fst + du + fa + dB + fst*fa) e(fst + fa + seas)
g(.) e(fst + du + seas + dB)
g(fst + fa + dB + fst*fa) e(veg + fst + seas)
g(veg + du + fa + dB) e(veg + fst + du + fa + seas)
g(veg + du) e(fst + fa + dB)
g(seas + dB) e(veg + fst + seas)
g(fst + du + fa + seas + dB) e(veg + fst + dB)
g(fa + dB) e(fst + fa + dB)
g(fst + fa + seas + dB) e(du + seas + dB)
g(fst + fa + seas + dB) e(veg + fst + du + seas)
g(veg + fst + seas + dB) e(veg + fst + du + dB)
g(veg + fst + dB) e(fst + fa + dB)
g(fst + fa) e(fst + du + fa + seas + fst*fa)
g(fst + fa + dB + fst*fa) e(fst + du + fa + seas)
g(fst + du + fa) e(veg + fst + du + fa)
g(fst) e(fst + du + fa + seas + dB)
g(veg + fst + du) e(veg + fst + du + fa + seas + dB + fst*fa)
g(fst) e(veg + fst + fa + dB + fst*fa)
g(veg + fst + du + fa + seas + fst*fa) e(fst + du + fa)
g(veg + fst + du + fa + dB) e(veg + du + fa + seas + dB)
g(fst + x) e(veg + seas + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(veg + seas + dB)
g(fst + du + fa) e(fst + fa + seas + fst*fa)
g(fst + du + fa) e(fst + du + fa + seas)
g(du) e(du + seas + dB)
g(du) e(veg + fst)
g(veg + fst + du + seas) e(du + fa + seas + dB)

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$g(\text{veg} + \text{fst} + \text{fa} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst}*\text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(.) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa}) e(\text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$

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$g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(.) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$

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$g(\text{veg} + \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{du} + \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{du} + \text{seas})$
 $g(.) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$

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$g(\text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$

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$g(\text{fst} + x) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + x)$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$

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$g(\text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{fst})$
 $g(\text{du} + \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{fa} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$

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$g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + x) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + x) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(.) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$

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g(seas) e(veg + fst + fa + fst*fa)
g(veg + fa) e(fst + du + seas + dB)
g(veg + fst + fa + seas + fst*fa) e(fst + fa + seas + dB + fst*fa)
g(veg + du + fa + seas + dB) e(veg + fa + seas)
g(veg + du + seas + dB) e(du + fa + dB)
g(fst + fa + dB) e(fst + du + fa + fst*fa)
g(veg + fa) e(veg + fst + du)
g(veg + du) e(veg + fst + du + fa + seas + fst*fa)
g(veg + fst + du + fa + dB + fst*fa) e(veg + fa)
g(du) e(fst + seas + dB)
g(du) e(fst + fa + seas)
g(fst + fa + dB) e(fst + du + seas + dB)
g(du + seas) e(veg + fst + fa)
g(dB) e(veg + seas + dB)
g(veg + fst + du + fa) e(fst + du + fa + fst*fa)
g(fst + du + fa) e(fst + du + fa + fst*fa)
g(seas) e(veg + du + seas + dB)
g(fst + du + fa + dB) e(fst + fa + dB)
g(veg + fst + du + fa + dB) e(du + seas + dB)
g(fst + du + fa + seas) e(fst + fa + seas + dB)
g(veg + fst + du + seas + dB) e(veg + fst + fa + fst*fa)
g(veg + fst + du + fa + seas + fst*fa) e(du + fa + seas)
g(fst + du + fa + dB + fst*fa) e(fst + fa + dB)
g(fst + fa + seas + dB + fst*fa) e(du + seas + dB)
g(fst + du + fa + dB + fst*fa) e(veg + dB)
g(veg + dB) e(du + fa + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(veg + fa)
g(fa + seas + dB) e(veg + fa + dB)
g(du + seas) e(veg + fst + seas)
g(fst + fa + dB) e(veg + fst + fa + fst*fa)
g(fst + du + fa + fst*fa) e(veg + fst + du)
g(veg + du + fa + seas) e(veg + fa + dB)
g(veg + fst + du + fa + dB + fst*fa) e(veg + du + fa + seas)
g(veg + du + fa + seas) e(veg + fst + dB)
g(veg + du + seas + dB) e(fst + du + dB)
g(veg + fst + fa + seas + fst*fa) e(veg + du + fa)

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g(du + seas) e(veg + fst + du)
g(veg + du + fa + seas) e(fa + seas + dB)
g(dB) e(veg + fa + dB)
g(veg + fst + du + fa + seas) e(veg + du + fa + seas + dB)
g(fst + du + dB) e(fst + du + fa)
g(fst + fa + seas) e(fst + du + fa + dB + fst*fa)
g(fst + fa + dB) e(veg + du + dB)
g(veg + fst + fa + seas + dB) e(du + fa + dB)
g(veg + fst) e(fst + fa + seas + dB + fst*fa)
g(fst + du + fa + dB) e(veg + fst + dB)
g(fst + fa + seas + dB) e(fst + seas + dB)
g(veg + fst + du + fa + seas + fst*fa) e(veg + du + fa)
g(veg + fst + du + seas + dB) e(veg + fst + du + fa + dB)
g(fst) e(veg + du + fa + seas)
g(fst + fa + dB + fst*fa) e(fst + fa + seas)
g(veg + fst + du + seas) e(veg + fst + du + fa + dB + fst*fa)
g(veg + fst + fa + fst*fa) e(fst + du + fa + seas + dB)
g(veg + du + fa) e(fst + fa + dB)
g(fa + seas) e(fst + du + fa + seas)
g(veg + fst + du + fa + seas + fst*fa) e(fst + fa + dB + fst*fa)
g(fst + du) e(fst + du + fa + dB)
g(fa + seas + dB) e(fst + fa + seas)
g(du + fa + seas) e(du + fa + seas)
g(du + dB) e(du + fa)
g(veg + fst + du + fa + seas) e(veg + fst + du + fa + dB)
g(fst + fa + seas + fst*fa) e(fst + du + fa + seas + dB)
g(fst + du + fa + fst*fa) e(veg + fst + fa + seas)
g(veg + fst + fa + dB + fst*fa) e(veg + du + seas)
g(fst + du + fa) e(veg + fa + seas)
g(dB) e(fst + du + fa)
g(veg + fst + du + seas + dB) e(veg + fst + fa + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(fst + du + seas)
g(fst + fa + seas + dB + fst*fa) e(veg + fst + fa + dB + fst*fa)
g(fst + du + fa + seas + dB + fst*fa) e(du + seas)
g(veg + fst + du + fa + dB + fst*fa) e(veg + du + dB)
g(veg + fst + du + fa + fst*fa) e(fst + fa + seas + dB + fst*fa)

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$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$

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$g(\text{veg} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa})$

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$g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$

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$g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(.) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$

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$g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$

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$g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(.) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$

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$g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$

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g(veg) e(fst + du + fa + fst*fa)
g(veg + du + fa + seas + dB) e(veg + du + fa + dB)
g(fst + du + fa + seas + fst*fa) e(veg + fst + fa + dB)
g(du + fa + seas + dB) e(veg + fa)
g(fa + dB) e(veg + du + dB)
g(veg + fst + dB) e(veg + du + fa + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(fst + x)
g(veg + fst + fa + dB) e(fst + fa + seas + fst*fa)
g(du + fa + seas) e(fst + du + dB)
g(veg + fst + du + fa + dB + fst*fa) e(du + seas + dB)
g(fa + dB) e(du + fa + seas + dB)
g(dB) e(veg + du + seas)
g(.) e(fst + fa + seas + dB)
g(veg) e(veg + fst + fa + fst*fa)
g(du + seas + dB) e(fst + du + dB)
g(fst + du + seas + dB) e(seas + dB)
g(veg + seas + dB) e(fa + seas + dB)
g(du + seas + dB) e(du + seas + dB)
g(veg + fst + du + fa + dB + fst*fa) e(fst + fa + seas + fst*fa)
g(veg + du) e(veg + fst + fa + fst*fa)
g(veg + fa + dB) e(veg + fst + du + seas + dB)
g(veg + du + seas + dB) e(veg + fst + du + fa + dB)
g(du + seas + dB) e(fst + fa + dB)
g(veg + du + seas + dB) e(veg + fst + fa + seas + dB)
g(veg + du + seas) e(fst + fa + seas + fst*fa)
g(veg + fst + fa) e(fst + fa + seas + dB + fst*fa)
g(du + seas + dB) e(fa + seas + dB)
g(veg + fst) e(veg + fst + du + fa + dB)
g(veg + du) e(veg + fst + fa + dB)
g(veg + fst + fa + dB) e(veg + fa + seas + dB)
g(fst + fa + seas + dB + fst*fa) e(fst + du + fa + seas)
g(du) e(fst + du + fa)
g(veg + du + fa + seas + dB) e(veg + fst + du + seas + dB)
g(veg + du + dB) e(fst + fa + dB)
g(seas + dB) e(fst + du + fa + dB)
g(veg + fst + du + fa + seas + dB) e(fst + du + fa)

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$g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$

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$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$

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$g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{dB})$

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g(.) e(veg + du + seas + dB)
g(veg + fst + du + seas + dB) e(fst + fa + seas + fst*fa)
g(veg + fst + du + seas) e(fst + du + fa + seas + dB)
g(veg + du + fa + seas) e(veg + fst + du + dB)
g(veg + seas + dB) e(veg + du + fa + seas)
g(fst + du + fa + fst*fa) e(veg + du + seas)
g(veg + fst + du + fa + seas) e(veg + fst + fa + seas + fst*fa)
g(veg + fa + seas + dB) e(fst + du + dB)
g(fst + du + fa + dB) e(fa + seas + dB)
g(veg + fa) e(veg + fst + fa + seas + fst*fa)
g(veg + du + fa + seas) e(fst + du + dB)
g(veg + fst + du + fa + seas + fst*fa) e(veg + fst + fa + seas + fst*fa)
g(veg + fst + fa + dB) e(fst + du + fa + fst*fa)
g(veg + fst + fa + seas) e(veg + du + fa + seas)
g(veg + seas + dB) e(fst + fa + dB)
g(fst + fa + dB) e(veg + du + seas)
g(fst + du + dB) e(veg + seas + dB)
g(seas + dB) e(veg + du + seas + dB)
g(fa + dB) e(veg + du + fa)
g(fst + du + fa + seas) e(veg + fst + fa + seas + dB)
g(fa + seas + dB) e(veg + du + fa)
g(veg + fa) e(fst + du + fa + fst*fa)
g(veg + fst + du + fa + seas + dB) e(veg + fa + dB)
g(veg) e(veg + fst + du + dB)
g(veg + du + fa) e(veg + du + fa + dB)
g(veg + du + fa) e(fst + fa + seas + fst*fa)
g(veg + du + fa + dB) e(veg + fst + du + fa + seas + dB + fst*fa)
g(veg + fst + du + seas + dB) e(fst + fa + seas + dB)
g(fst + du) e(veg + du + seas + dB)
g(veg + fst + du + fa + fst*fa) e(fst + du + fa + seas + fst*fa)
g(veg + fa + seas) e(veg + fst + fa + seas)
g(fst + du + fa + seas + fst*fa) e(veg + fst + seas + dB)
g(veg + fa + seas) e(du + fa + seas + dB)
g(fst + fa + seas) e(fst + fa + seas + dB + fst*fa)
g(veg) e(veg + fst + fa + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(veg + fa + seas + dB)

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g(veg + fst + seas) e(veg + fst + du + fa + seas + fst*fa)
g(fst + du + fa + fst*fa) e(fst + du + fa + seas + fst*fa)
g(fa + seas + dB) e(veg + fst + du)
g(veg) e(veg + du + fa + dB)
g(fst + du + fa + seas + dB) e(veg + fst + du + seas)
g(veg + fst + fa + seas + fst*fa) e(veg + fst + fa + dB + fst*fa)
g(fst + du + fa + dB + fst*fa) e(veg + seas)
g(veg + fst + fa + fst*fa) e(veg + du + fa + dB)
g(veg + fa + seas) e(veg + fst + du + seas)
g(fst + seas + dB) e(fa + seas + dB)
g(veg + du + seas) e(veg + fst + du + fa + fst*fa)
g(veg + fst + du + fa + dB + fst*fa) e(fst + du + fa)
g(fst + fa + dB + fst*fa) e(fst + du + fa + seas + fst*fa)
g(veg + fst + du + fa + dB + fst*fa) e(fst + fa + seas + dB)
g(veg + du + fa + seas) e(veg + fst + du + fa)
g(veg + fst + du + seas) e(fst + du + fa + seas + fst*fa)
g(veg + fst + seas + dB) e(fa + seas + dB)
g(fst + du + fa + seas + dB) e(veg + fst + du + fa)
g(fst + du + fa + seas) e(veg + fst + du + fa + fst*fa)
g(fst + fa + dB + fst*fa) e(veg + du + seas)
g(fst + du + fa + fst*fa) e(veg + fa + seas + dB)
g(veg + fst + du + fa + seas + fst*fa) e(fst + du + fa + fst*fa)
g(veg + fa + seas) e(veg + du + fa + seas)
g(fst + du + fa + seas) e(veg + fst + du + fa + seas)
g(fst + fa + seas + dB) e(fst + fa + dB + fst*fa)
g(veg + fst + du + seas + dB) e(fst + du + fa + dB)
g(fa) e(veg + du + fa + seas)
g(fst + fa + dB + fst*fa) e(veg + fst + fa + seas + dB + fst*fa)
g(veg + du + fa) e(fst + du + dB)
g(du) e(veg + seas + dB)
g(fst + fa + seas + dB + fst*fa) e(fst + fa + seas + dB + fst*fa)
g(veg + seas + dB) e(veg + fst + du + seas + dB)
g(fst + x) e(veg + fst + du + seas + dB)
g(fst + du + fa + dB + fst*fa) e(veg + fst + fa)
g(veg + fst + du + fa + seas + fst*fa) e(fst + fa + seas + dB)
g(fst + du + fa + fst*fa) e(veg + fst + du + fa)

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

g(du + fa + dB) e(veg + seas)
g(fst + fa + seas + dB) e(veg + du + fa)
g(fst) e(veg + fst + du + fa + seas + fst*fa)
g(fst) e(veg + fst + du + fa + seas + dB)
g(fa + dB) e(veg + fa + seas)
g(veg + fst + du + fa) e(fst + fa + seas + dB + fst*fa)
g(veg + du + dB) e(fst + du + dB)
g(fa + dB) e(veg + fst + dB)
g(veg + dB) e(du + fa + seas + dB)
g(fst + du) e(veg + fst + fa + dB + fst*fa)
g(fst) e(veg + fst + fa + seas + dB + fst*fa)
g(veg + seas + dB) e(veg + fst + fa + seas + dB)
g(fst + du + fa + dB) e(du + fa + dB)
g(.) e(veg + fst + du + seas)
g(fa + seas + dB) e(fa + seas + dB)
g(du + fa + seas + dB) e(veg + du)
g(veg + du + seas) e(fst + fa + seas + dB)
g(veg + fst + du + seas + dB) e(fst + du + fa + fst*fa)
g(du + fa + seas + dB) e(veg + seas)
g(veg + fst + dB) e(fst + du + fa + dB)
g(fa + seas + dB) e(veg + fst + seas)
g(veg + fst + du + seas) e(fst + du + fa + dB + fst*fa)
g(veg + fst + du + fa + dB + fst*fa) e(du + fa + dB)
g(veg + du + seas) e(du + fa + seas + dB)
g(fst + du + fa) e(veg + fst + fa + seas + dB)
g(fa + dB) e(veg + fst + fa)
g(veg + fst + fa + seas + fst*fa) e(veg + du + seas + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(fst + du + fa + fst*fa)
g(fa + seas + dB) e(veg + du + dB)
g(veg + du + seas) e(fst + du + seas + dB)
g(fst + x) e(veg + fst + fa + seas + fst*fa)
g(.) e(veg + du + fa + seas)
g(fst + du + fa + seas + fst*fa) e(veg + fst + fa + seas)
g(fst + du + fa + fst*fa) e(veg + fst + fa + seas + fst*fa)
g(veg + fst + fa + seas) e(veg + fst + du + seas + dB)
g(fa) e(veg + du + fa + dB)

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$g(\text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{du}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$

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$g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{x})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(.) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + x) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(.) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

g(veg + fst + du + fa + seas + fst*fa) e(du + fa + seas + dB)
g(veg + fa + seas + dB) e(veg + fst + du)
g(du + fa + dB) e(veg + fst)
g(veg + du + seas) e(veg + fst + du + fa + seas + dB)
g(fst + fa + dB + fst*fa) e(veg + fst + fa + seas + fst*fa)
g(du + fa + seas) e(veg + fst + dB)
g(veg + fa + seas + dB) e(veg + du + fa + dB)
g(fst + du + seas + dB) e(veg + fa + dB)
g(veg + fst + du + seas + dB) e(veg + fst + du + fa + seas + fst*fa)
g(veg + du + fa + seas + dB) e(fa + seas + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(veg + fa + seas)
g(du + seas + dB) e(veg + fst + du)
g(fa + seas) e(veg + fst + fa + seas)
g(fst + du + fa + seas) e(du + fa + seas + dB)
g(fst + du + fa) e(veg + fst + fa + dB + fst*fa)
g(fst + seas) e(fst + du + fa + seas + dB + fst*fa)
g(veg + fst + fa + dB) e(du + fa + seas + dB)
g(veg + fst + fa + fst*fa) e(veg + du + fa + seas + dB)
g(veg + fst + du + fa + seas + fst*fa) e(veg + fst + fa + seas)
g(du + fa) e(veg + fst + fa)
g(fa + seas) e(veg + du + fa + seas)
g(veg + fst + du + fa + seas + fst*fa) e(fst + du + fa + dB)
g(veg + du + dB) e(fst + du + fa)
g(veg + fst + fa + seas + dB + fst*fa) e(du + fa + seas + dB)
g(du + fa + seas) e(veg + seas + dB)
g(veg + du + fa + seas) e(veg + fst + du + fa + seas)
g(veg + fa + seas + dB) e(fst + fa + dB)
g(du + fa) e(veg + seas + dB)
g(fst + du + fa + seas + fst*fa) e(veg + fst + fa + seas + fst*fa)
g(fa + dB) e(fst + du + seas + dB)
g(fst + fa) e(veg + fst + fa + seas + dB + fst*fa)
g(fst + seas + dB) e(fst + du + fa + dB + fst*fa)
g(fst + fa + seas) e(veg + fst + fa + seas + dB + fst*fa)
g(fst + fa + seas + dB) e(du + fa + seas + dB)
g(fst + du + seas + dB) e(veg + du + seas)
g(fst + du + fa) e(veg + fst + du + seas + dB)

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + x) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(.) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(.) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + x) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + x) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$

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$g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + x) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + x) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst}*\text{fa})$
 $g(\text{du}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$

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g(du + seas) e(fst + du + fa + dB)
g(seas + dB) e(veg + fst + du + fa)
g(du + seas) e(fst + du + seas + dB)
g(fst + du + fa + seas + dB) e(du + seas + dB)
g(veg + fst + fa + seas + dB) e(du + seas + dB)
g(fst + du + fa + seas + dB) e(veg + fst + fa + dB)
g(du) e(veg + du + fa)
g(veg + du + fa + seas + dB) e(veg + fst + du + fa + seas)
g(veg + fst + fa + seas + dB) e(veg + du + fa)
g(veg) e(veg + fst + fa + seas + dB + fst*fa)
g(veg + fst + du + fa + seas + dB) e(veg + fa + seas + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(fst + du + fa)
g(du + fa + dB) e(fst + du + fa)
g(fa + dB) e(veg + du + fa + dB)
g(veg + fa + dB) e(veg + fst + du)
g(du + seas) e(fst + fa + seas + fst*fa)
g(du) e(veg + fst + dB)
g(fst + du + fa) e(fst + du + fa + seas + fst*fa)
g(fst + fa + dB) e(fst + du + fa + seas + fst*fa)
g(fa + seas + dB) e(fst + du + fa + fst*fa)
g(fa + seas + dB) e(fst + du + seas + dB)
g(veg + seas + dB) e(fst + du + fa + fst*fa)
g(seas + dB) e(veg + du + fa + dB)
g(veg + seas + dB) e(fst + du + fa + seas)
g(veg + fst + du + fa + seas + dB + fst*fa) e(du + fa + dB)
g(veg + fa) e(veg + du + fa + dB)
g(fst + du + fa + seas + dB + fst*fa) e(fst + fa + seas + fst*fa)
g(veg + dB) e(fst + du + fa + dB)
g(seas + dB) e(veg + fst + du + seas)
g(veg + du + fa) e(veg + fst + fa + seas + dB)
g(veg + du + fa + dB) e(fst + du + dB)
g(du + seas) e(fst + fa + dB + fst*fa)
g(veg + fst + fa + seas + dB + fst*fa) e(veg + fst + seas + dB)
g(veg + fst + du + fa + dB) e(veg + fst + fa + fst*fa)
g(veg + du + fa + dB) e(veg + fst + fa + seas + fst*fa)
g(fst + du + fa + dB + fst*fa) e(fst + fa + dB + fst*fa)

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$g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{du} + \text{fa} + \text{seas})$

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g(.) e(veg + fst + fa + fst*fa)
g(fst + du + fa + dB) e(fst + fa + seas + fst*fa)
g(fst + du + fa + dB) e(veg + fst + fa + dB)
g(veg + fa) e(veg + du + fa + seas + dB)
g(dB) e(fst + du + fa + dB)
g(.) e(fst + du + fa + seas + dB)
g(fst + du + fa + dB + fst*fa) e(fst + du + fa + seas)
g(fst + fa + seas + dB) e(veg + fst + fa + seas + dB)
g(veg + seas) e(fst + du + fa + seas + dB)
g(veg + fst + fa + seas + dB) e(fst + fa + seas + fst*fa)
g(veg + fa) e(veg + fst + fa + seas + dB)
g(seas + dB) e(veg + fst + fa + seas)
g(veg + fa + dB) e(fst + du + fa + seas)
g(fa + seas + dB) e(fst + seas + dB)
g(fst + du + fa + seas + dB) e(veg + fst + seas + dB)
g(veg + fa + seas + dB) e(fst + seas + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(veg + fa + seas)
g(fst + du + fa + seas + dB + fst*fa) e(veg + fst + dB)
g(du) e(du + fa + seas + dB)
g(fst + fa + dB) e(veg + fst + du + seas + dB)
g(veg + du) e(fst + du + fa + fst*fa)
g(veg + fst + fa + seas + dB + fst*fa) e(fst + fa + seas + dB)
g(veg + du + seas + dB) e(veg + fst + fa + seas + fst*fa)
g(seas + dB) e(veg + fa + seas + dB)
g(seas + dB) e(veg + fst + fa + dB)
g(veg + fst + seas + dB) e(veg + fst + du + fa + dB)
g(du + fa + seas + dB) e(fst + du + fa)
g(du) e(fst + du + seas + dB)
g(veg + fst + du + fa + dB + fst*fa) e(fst + du + fa + seas)
g(veg + fa + seas) e(veg + fst + du + fa)
g(veg + dB) e(fst + fa + seas + dB)
g(veg + seas + dB) e(fst + fa + seas + fst*fa)
g(veg + fst + fa + seas + dB) e(veg + fa + seas + dB)
g(veg + du + dB) e(veg + fst + du + fa + fst*fa)
g(veg + du) e(fst + du + fa + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(fst + fa + dB + fst*fa)

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$g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(dB) e(veg + du + seas + dB)$
 $g(veg + du + fa + dB) e(fst + du + fa)$
 $g(fst + fa + dB + fst*fa) e(veg + du + seas + dB)$
 $g(du + seas) e(fst + fa + seas + dB)$
 $g(veg + fst + du + fa + seas) e(veg + fst + fa + dB + fst*fa)$
 $g(veg + fa + dB) e(fst + fa)$
 $g(fst + du + dB) e(veg + fa + seas)$
 $g(veg + fst + fa) e(fst + du + fa + seas + dB + fst*fa)$
 $g(veg + fst + fa + dB) e(veg + fst + fa + seas + dB)$
 $g(veg + fst + fa + dB + fst*fa) e(veg + fst + du)$
 $g(veg + fa) e(veg + fst + du + seas + dB)$
 $g(fst + seas + dB) e(fst + fa + seas + fst*fa)$
 $g(veg + seas + dB) e(veg + fst + fa + seas + fst*fa)$
 $g(veg + du) e(fst + fa + seas + dB + fst*fa)$
 $g(fst + fa + seas + dB + fst*fa) e(veg + fst + seas + dB)$
 $g(fst + du + seas + dB) e(veg + du + fa + dB)$
 $g(du + fa) e(veg + du + dB)$
 $g(fst + du + fa + dB + fst*fa) e(veg + fst + fa + dB + fst*fa)$
 $g(veg + fst + seas + dB) e(fst + du + fa + seas + fst*fa)$
 $g(.) e(veg + fst + fa + dB)$
 $g(veg + du + fa + dB) e(veg + fst + du + fa + dB)$
 $g(seas + dB) e(veg + fst + du + dB)$
 $g(veg + fst + du + fa + fst*fa) e(veg + fst + fa + dB + fst*fa)$
 $g(fst + fa + dB) e(veg + du + seas + dB)$
 $g(fst + du + seas + dB) e(veg + fst + fa + dB + fst*fa)$
 $g(du + fa + dB) e(fst + du + dB)$
 $g(fst + du + dB) e(veg + du + seas)$
 $g(fst + du + seas + dB) e(veg + du + seas + dB)$
 $g(veg + du + fa + seas + dB) e(fst + fa + seas)$
 $g(dB) e(fst + fa + seas + fst*fa)$
 $g(fst + du + fa + dB + fst*fa) e(du + fa + seas + dB)$
 $g(fa) e(veg + fst + du + dB)$
 $g(fst + fa + seas + dB + fst*fa) e(veg + fst + fa + seas + dB)$
 $g(du + dB) e(fst + du + dB)$
 $g(veg + du + dB) e(fst + fa + seas + dB)$
 $g(veg + fst + fa + dB) e(fst + du + fa + seas + fst*fa)$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$

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$g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$

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$g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{du} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(.) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{dB})$

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g(veg + fst + fa + seas) e(veg + du + fa + seas + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(veg + fst + dB)
g(fst + du + fa + dB + fst*fa) e(veg + fst + fa + fst*fa)
g(fst + du + fa + seas) e(fst + fa + seas + dB + fst*fa)
g(dB) e(veg + du + fa + dB)
g(du + fa + seas) e(fst + du + fa + dB)
g(fst + du + fa + fst*fa) e(veg + fst + du + fa + fst*fa)
g(fst + seas + dB) e(fst + du + fa + seas + dB)
g(fa + dB) e(veg + du + seas + dB)
g(fst + seas + dB) e(veg + fst + du + fa + seas + dB)
g(fst + fa + dB + fst*fa) e(veg + du + fa + seas)
g(dB) e(veg + fst + seas + dB)
g(veg + du + seas + dB) e(fst + fa + seas + fst*fa)
g(fst + du + fa + seas) e(fst + du + fa + seas + dB)
g(seas) e(veg + du + fa + seas + dB)
g(fst + du + fa + dB) e(fst + fa + dB + fst*fa)
g(veg + seas) e(veg + fst + fa + seas + dB + fst*fa)
g(fst + du + fa + seas + dB) e(fst + du + fa + dB)
g(fst + du) e(fst + du + fa + dB + fst*fa)
g(du) e(fst + fa + seas + dB)
g(fa + dB) e(veg + fst + seas + dB)
g(veg + du + seas + dB) e(fst + du + fa + dB)
g(seas) e(veg + fst + du + seas + dB)
g(veg + du + fa + seas) e(veg + fst + fa + dB)
g(fst + du + fa + dB + fst*fa) e(veg + fa + seas)
g(fst + du + dB) e(veg + fst + fa + seas + fst*fa)
g(du + fa + seas + dB) e(veg + fst + fa)
g(fa + seas + dB) e(veg + fst + fa + dB)
g(dB) e(veg + fst + fa + dB)
g(veg + du + fa + seas + dB) e(veg + fst + fa + seas)
g(fst + du + dB) e(fst + du + fa + fst*fa)
g(du + seas) e(veg + fst + fa + seas)
g(fst + du + dB) e(fst + du + fa + dB)
g(veg + fst + fa + seas + dB) e(veg + fst + fa + seas + fst*fa)
g(fst + fa + seas) e(fst + du + fa + seas + dB + fst*fa)
g(du + seas) e(veg + fst + du + fa)

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$g(\text{du} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$

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$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(.) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + x) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$

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$g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$

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$g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$

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$g(du + fa + dB) e(fst + du + fa + dB)$
 $g(du) e(veg + du + fa + seas)$
 $g(fst + du + fa + fst*fa) e(veg + fst + du + fa + seas + fst*fa)$
 $g(du + fa + seas) e(veg + du + fa + dB)$
 $g(veg + fst + fa + seas) e(veg + fst + du + fa + seas + dB)$
 $g(fst + du + fa + dB + fst*fa) e(veg + fst + fa + seas + fst*fa)$
 $g(fst + du + fa) e(veg + fst + du + fa + seas + dB)$
 $g(du) e(veg + fst + fa + seas)$
 $g(fa + seas + dB) e(veg + fst + du + dB)$
 $g(fa + seas) e(veg + fst + du + fa + dB)$
 $g(veg + fa + seas) e(fst + fa + seas + dB + fst*fa)$
 $g(fa) e(veg + fst + fa + seas + dB)$
 $g(veg + fst + fa + seas + fst*fa) e(veg + fst + fa + seas + dB)$
 $g(fst + du + fa + seas + fst*fa) e(veg + du + fa + seas)$
 $g(du + dB) e(veg + fst + fa)$
 $g(veg + fst + du + dB) e(fst + du + fa + dB + fst*fa)$
 $g(veg + du + dB) e(fst + fa + seas + dB + fst*fa)$
 $g(fa) e(veg + fst + du + fa + dB)$
 $g(du + fa) e(veg + du + fa + dB)$
 $g(fst + fa + seas + dB) e(veg + du + seas + dB)$
 $g(fst + fa) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(fst + du + fa + seas + dB + fst*fa) e(veg + fa + seas)$
 $g(dB) e(fst + du + fa + seas + fst*fa)$
 $g(veg + fst + fa + seas + dB + fst*fa) e(veg + fst + du + seas)$
 $g(du + fa + seas) e(veg + fa + seas + dB)$
 $g(veg + dB) e(veg + du + fa)$
 $g(fst + du + fa + dB + fst*fa) e(veg + fst + seas + dB)$
 $g(veg + fst + fa + dB) e(veg + fst + du + fa + seas + fst*fa)$
 $g(fst + du + seas) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(fa + seas) e(veg + du + fa + seas + dB)$
 $g(veg + fst + fa + seas + dB) e(veg + fst + du + fa + seas)$
 $g(fst + du + seas + dB) e(veg + fst + du + fa + dB + fst*fa)$
 $g(fa + seas + dB) e(veg + fst + seas + dB)$
 $g(du + seas + dB) e(fst + du + fa + fst*fa)$
 $g(veg + fa + dB) e(fst + fa + seas)$
 $g(du + seas + dB) e(fst + fa + seas + fst*fa)$

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$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$

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$g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst*fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst*fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst*fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst*fa})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst*fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst*fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst*fa})$

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g(.) e(veg + fst + fa + seas + dB)
g(du + dB) e(veg + du + fa)
g(veg + seas + dB) e(fst + du + fa + seas + fst*fa)
g(veg + dB) e(veg + fst + du + fa + seas + fst*fa)
g(veg + seas + dB) e(veg + fst + du + fa + fst*fa)
g(fa + seas) e(veg + fst + du + fa + seas)
g(fst + fa + seas + dB + fst*fa) e(veg + fst + du + fa + seas)
g(fst + du + fa + seas + dB + fst*fa) e(fst + du + seas + dB)
g(fst + du + fa + seas + fst*fa) e(veg + fst + du + fa + dB + fst*fa)
g(veg + fst + du + fa + seas + dB + fst*fa) e(veg + fst + seas + dB)
g(fst + du + seas + dB) e(fst + du + fa + seas + fst*fa)
g(du + seas + dB) e(fst + du + fa + seas)
g(du + fa + seas + dB) e(veg + fst + fa + dB)
g(du + fa + seas + dB) e(veg + du + fa + dB)
g(veg + du + fa + dB) e(fst + fa + seas + dB + fst*fa)
g(veg + seas) e(fst + du + fa + seas + dB + fst*fa)
g(fa) e(fst + du + fa + seas + dB + fst*fa)
g(fst + fa + seas) e(veg + fst + du + fa + seas + dB + fst*fa)
g(dB) e(veg + fst + fa + fst*fa)
g(veg + du + fa) e(fst + du + fa + seas + dB)
g(fst + du + seas + dB) e(fst + du + fa + seas + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(fst + du + fa + seas)
g(fst + du + dB) e(veg + du + fa + dB)
g(du + fa + dB) e(fst + du + fa + seas)
g(veg + fst + fa + seas + dB) e(fst + du + fa + seas + fst*fa)
g(veg + fst + fa + seas + dB + fst*fa) e(veg + du + fa + dB)
g(fst + fa + dB + fst*fa) e(veg + fst + du + fa + seas + fst*fa)
g(veg + du + dB) e(fst + du + fa + fst*fa)
g(.) e(fst + du + fa + seas + dB + fst*fa)
g(fst + fa + seas + dB + fst*fa) e(veg + du + fa + seas + dB)
g(fst + fa + dB) e(veg + du + fa + seas + dB)
g(veg + du) e(veg + fst + du + fa + dB + fst*fa)
g(du + fa) e(veg + fst + du + fa)
g(fst + du + fa + dB) e(veg + du + fa + dB)
g(veg + fa + seas + dB) e(fst + du + seas + dB)
g(veg + fa) e(veg + fst + fa + dB + fst*fa)

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g(veg + fa + dB) e(veg + fst + du + fa + seas)
g(fst + fa + dB) e(veg + fst + du + fa + seas + fst*fa)
g(fst + fa + dB + fst*fa) e(veg + fst + du + seas + dB)
g(fst + du + fa + seas + dB + fst*fa) e(veg + fa + seas + dB)
g(veg + fst + fa + dB + fst*fa) e(veg + fst + du + fa + seas)
g(fst + du + fa + seas + dB) e(du + fa + seas + dB)
g(du + fa) e(veg + du + seas + dB)
g(fst + du + fa + seas) e(veg + du + fa + seas + dB)
g(veg + fst + fa + seas + dB + fst*fa) e(veg + du + fa + seas)
g(veg + fa + dB) e(fst + du + fa + seas + fst*fa)
g(veg + fa) e(fst + du + fa + seas + dB + fst*fa)
g(fa) e(veg + fst + du + seas + dB)
g(veg + fa + seas + dB) e(veg + fst + du + fa)
g(seas) e(fst + du + fa + seas + dB + fst*fa)
g(fst + fa + dB) e(veg + fst + du + fa + seas + dB)
g(veg + fst + du + fa + seas + dB) e(du + fa + seas + dB)
g(fst + du + dB) e(fst + fa + seas + dB)
g(du + fa + seas) e(veg + du + fa + seas)
g(veg + fst + du + fa + fst*fa) e(veg + fst + du + fa + dB + fst*fa)
g(du + fa + dB) e(fst + fa + dB + fst*fa)
g(du + fa + dB) e(fst + du + seas + dB)
g(du) e(fst + du + fa + seas + fst*fa)
g(veg + fst + fa + seas + dB) e(veg + fst + du + fa + fst*fa)
g(veg + du + fa + seas) e(veg + fst + du + fa + seas + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(veg + fst + fa + seas)
g(fst + du + fa + dB) e(veg + fst + du + seas + dB)
g(fst + du + fa + fst*fa) e(veg + fst + du + seas + dB)
g(du + dB) e(fst + fa + seas + dB)
g(du + fa + seas) e(veg + fst + seas + dB)
g(du + seas + dB) e(veg + fst + du + fa)
g(veg + du + fa + seas + dB) e(fst + fa + seas + dB)
g(fst + du + fa + seas + fst*fa) e(veg + fst + du + fa + seas + fst*fa)
g(veg + du + fa + seas + dB) e(veg + fst + fa + fst*fa)
g(du + seas + dB) e(veg + fst + du + seas)
g(fst + du + fa + seas + dB + fst*fa) e(veg + fst + fa + seas + fst*fa)
g(veg + fst + du + fa + seas + dB + fst*fa) e(fst + du + fa + dB)

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$g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + x) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$

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g(seas + dB) e(veg + fst + du + seas + dB)
g(veg + du + fa + seas) e(veg + fst + fa + dB + fst*fa)
g(fst + du + fa + seas + dB + fst*fa) e(veg + fst + fa + seas + dB)
g(veg + fst + du + fa + dB) e(veg + fst + du + fa + dB + fst*fa)
g(veg + fst + dB) e(fst + du + fa + seas + dB + fst*fa)
g(veg + du + fa + seas) e(fst + fa + seas + dB + fst*fa)
g(veg + fst + du + fa + seas + dB + fst*fa) e(veg + fst + du + fa + seas + dB + fst*fa)
g(fst + du + seas + dB) e(veg + fst + du + fa + seas + dB)
g(fst + fa + seas + dB) e(fst + fa + seas + dB + fst*fa)
g(veg + fst + du + fa + dB + fst*fa) e(veg + fst + du + fa + dB)
g(du + seas) e(veg + fst + fa + seas + fst*fa)
g(veg + fst + fa + seas + dB) e(veg + fst + du + fa + dB)
g(fa + seas) e(fst + du + fa + seas + dB + fst*fa)
g(du + fa + dB) e(veg + fst + seas + dB)
g(veg + fst + du + dB) e(fst + du + fa + seas + dB + fst*fa)
g(veg + fa + seas) e(veg + fst + du + fa + seas + fst*fa)
g(du + fa + dB) e(veg + du + seas + dB)
g(veg + du + fa + seas + dB) e(fst + fa + dB + fst*fa)
g(seas) e(veg + fst + fa + seas + dB + fst*fa)
g(veg + fst + fa + dB + fst*fa) e(veg + fst + du + seas + dB)
g(veg + fst + du + fa + dB) e(fst + du + fa + dB + fst*fa)
g(fst + du + fa + seas + dB + fst*fa) e(veg + fst + du + fa + fst*fa)
g(seas) e(veg + fst + du + fa + seas + fst*fa)
g(veg + fst + du + fa + seas + dB + fst*fa) e(fst + du + seas + dB)
g(veg + du + fa + seas + dB) e(du + fa + seas + dB)
g(du + dB) e(veg + fa + seas + dB)
g(veg + seas + dB) e(fst + du + fa + seas + dB)
g(du + seas + dB) e(veg + fst + fa + dB + fst*fa)
g(du + fa + seas) e(fst + du + fa + dB + fst*fa)
g(veg + fst + seas + dB) e(veg + fst + du + fa + seas + dB)
g(veg + du + seas + dB) e(fst + du + fa + dB + fst*fa)
g(du + seas) e(veg + fst + du + fa + fst*fa)
g(fst + du + fa + dB) e(fst + du + fa + dB + fst*fa)
g(veg + dB) e(veg + fst + du + fa + fst*fa)
g(fst + fa + dB + fst*fa) e(veg + fst + du + fa + seas + dB)
g(fst + seas + dB) e(veg + fst + du + fa + seas + dB + fst*fa)

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$g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$

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$g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$

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g(seas + dB) e(fst + du + fa + seas + dB + fst*fa)
g(fst + du + fa + fst*fa) e(veg + fst + du + fa + seas + dB + fst*fa)
g(fst + du + fa + seas + dB) e(fst + du + fa + seas + fst*fa)
g(fst + du + seas + dB) e(fst + fa + seas + dB + fst*fa)
g(fst + du + fa + seas + dB + fst*fa) e(fst + du + fa + seas + dB)
g(veg + fst + du + fa + seas + dB) e(veg + fst + fa + seas + dB + fst*fa)
g(veg + fst + du + fa + seas + dB + fst*fa) e(fst + du + fa + dB + fst*fa)
g(fst + du + fa + dB + fst*fa) e(veg + fst + du + fa + seas)
g(veg + fst + fa + seas + dB) e(fst + du + fa + seas + dB)
g(du + dB) e(veg + fst + du + seas)
g(du + fa + dB) e(veg + fst + du + dB)
g(veg + du + fa + dB) e(fst + du + fa + seas + fst*fa)
g(du) e(fst + du + fa + dB + fst*fa)
g(du + seas + dB) e(fst + du + fa + dB + fst*fa)
g(fa + seas + dB) e(veg + fst + fa + seas + fst*fa)
g(fst + du + dB) e(veg + fst + du + fa + seas + dB)
g(fa + dB) e(fst + du + fa + seas + dB + fst*fa)
g(veg) e(veg + fst + du + fa + dB + fst*fa)
g(veg + fa + seas + dB) e(veg + fst + du + fa + seas)
g(seas + dB) e(fst + fa + seas + dB + fst*fa)
g(du + fa + dB) e(veg + fst + fa + fst*fa)
g(veg + du + fa + seas) e(veg + fst + fa + seas + dB + fst*fa)
g(veg + fa + seas + dB) e(fst + du + fa + seas + fst*fa)
g(du + seas + dB) e(veg + fst + du + fa + dB)
g(veg + fst + du + fa + seas + dB + fst*fa) e(veg + fst + du + fa + fst*fa)
g(veg + fa + seas) e(fst + du + fa + seas + dB + fst*fa)
g(du + seas + dB) e(fst + fa + seas + dB + fst*fa)
g(veg + fst + du + fa + seas + dB) e(fst + du + fa + seas + fst*fa)
g(fst + du + fa + dB + fst*fa) e(veg + fst + du + fa + dB)
g(veg + fa + seas + dB) e(fst + fa + seas + dB + fst*fa)
g(veg + du + fa + seas) e(fst + du + fa + dB + fst*fa)
g(veg + fa + seas + dB) e(veg + fst + du + fa + seas + dB)
g(fst + du + fa + seas + dB) e(veg + fa + seas + dB)
g(fst + du + fa + dB + fst*fa) e(fst + du + fa + seas + dB + fst*fa)
g(veg + fst + du + fa + seas + dB) e(fst + du + fa + seas + dB)
g(dB) e(veg + fst + du + fa + seas)

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$g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(.) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{fst} + \text{x}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{veg} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$

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$g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa})$

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$g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{veg} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(.) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(\text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
$g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
$g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
$g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst}*\text{fa})$
$g(\text{veg} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
$g(\text{fst} + \text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB})$
$g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
$g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{du} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst}*\text{fa})$
$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{veg} + \text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{fst} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$
$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
$g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst}*\text{fa})$

Table A2. Full list of candidate models tested for each species. For stage 1, 512 candidate models were fit for occupancy and detection with the full or null parameterization of colonization and extinction. The top parameterization for occupancy and detection based on AIC from stage 1 was used for stage 2, to test 6241 candidate models for colonization and extinction. veg = vegetation, fst = fire status, du = distance to urban edge, fa = fire age, seas = season, dB = distance to burn edge

$g(dB) e(veg + fst + du + fa + seas + dB)$
 $g(veg + fa + seas + dB) e(fst + du + fa + seas + dB + fst*fa)$
 $g(du + dB) e(veg + fst + fa + seas + fst*fa)$
 $g(du + seas) e(veg + fst + fa + seas + dB + fst*fa)$
 $g(du + fa + dB) e(veg + fst + fa + seas + fst*fa)$
 $g(seas) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(fst + du + fa + seas + dB) e(fst + fa + seas + dB + fst*fa)$
 $g(fst + du + seas + dB) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(veg + fa + seas) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(dB) e(veg + fst + du + fa + dB + fst*fa)$
 $g(dB) e(veg + fst + du + fa + seas + fst*fa)$
 $g(fst + du + fa + dB + fst*fa) e(veg + fst + du + fa + seas + dB)$
 $g(fst + du + fa + seas + dB + fst*fa) e(veg + fst + du + fa + seas + dB)$
 $g(du + seas) e(veg + fst + du + fa + dB + fst*fa)$
 $g(du + seas + dB) e(veg + fst + du + seas + dB)$
 $g(fa + dB) e(veg + fst + du + fa + seas + fst*fa)$
 $g(veg + du + fa + seas) e(fst + du + fa + seas + dB + fst*fa)$
 $g(du + seas) e(veg + fst + du + fa + seas + fst*fa)$
 $g(du + fa + seas) e(fst + du + fa + seas + dB + fst*fa)$
 $g(du + fa + dB) e(veg + fst + du + seas + dB)$
 $g(veg + du + fa + seas + dB) e(fst + du + fa + seas + dB)$
 $g(du + fa + seas + dB) e(veg + fst + fa + seas + fst*fa)$
 $g(du + seas + dB) e(veg + fst + du + fa + dB + fst*fa)$
 $g(fa + seas + dB) e(fst + du + fa + seas + dB + fst*fa)$
 $g(du + fa + seas + dB) e(veg + fst + du + fa + fst*fa)$
 $g(du + dB) e(veg + fst + du + fa + dB)$
 $g(veg + fst + fa + seas + dB) e(fst + du + fa + seas + dB + fst*fa)$
 $g(veg + fst + fa + seas + dB) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(fst + du + dB) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(.) e(veg + fst + du + fa + seas + dB + fst*fa)$
 $g(du + seas) e(veg + fst + du + fa + seas + dB)$
 $g(fst + du + fa + seas + dB) e(fst + du + fa + seas + dB + fst*fa)$
 $g(du + fa + dB) e(veg + fst + du + fa + seas)$
 $g(fa + seas + dB) e(veg + fst + du + fa + seas + dB)$
 $g(du + fa + seas + dB) e(veg + du + fa + seas + dB)$
 $g(du + fa + seas + dB) e(veg + fst + fa + seas + dB)$

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$g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{veg} + \text{du} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{fst} + \text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
 $g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$

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$g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{seas} + \text{dB})$
$g(\text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
$g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{veg} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
$g(\text{du} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
$g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{fst} * \text{fa})$
$g(\text{du}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB})$
$g(\text{du} + \text{fa}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{fa} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{fa} + \text{seas}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$
$g(\text{du} + \text{fa} + \text{seas} + \text{dB}) e(\text{veg} + \text{fst} + \text{du} + \text{fa} + \text{seas} + \text{dB} + \text{fst} * \text{fa})$

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