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SANTA CRUZ

**THE BIOGEOGRAPHY OF GLOBALLY THREATENED SEABIRDS AND  
ISLAND CONSERVATION OPPORTUNITIES**

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

MASTER OF ARTS

in

ECOLOGY AND EVOLUTIONARY BIOLOGY

by

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September 2013

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## Abstract

# **THE BIOGEOGRAPHY OF GLOBALLY THREATENED SEABIRDS AND ISLAND CONSERVATION OPPORTUNITIES**

by

**DENA R. SPATZ**

Seabirds are the most threatened group of marine animals, with 29% of species at some risk of extinction. Significant threats to seabirds occur on islands where they breed, but in many cases, effective island conservation can mitigate these threats. To guide island-based seabird conservation actions, we identified all islands with extant or extirpated populations of the 98 globally threatened seabird species recognized by the IUCN Red List and quantified the presence and extent of threatening invasive alien species, protected areas and human populations. We used these data to highlight feasible island conservation opportunities. We identified 1,362 threatened seabird breeding populations on 968 islands. Threatening invasive species and/or lack of adequate protection was identified on 803 of these islands (580 (59.9%) and 609 (63%) islands, respectively). Most identified islands were small (57% were <1km<sup>2</sup>), uninhabited (74%), and occurred in countries designated as high or middle income (96%). Collectively these attributes make threatened seabird islands ideal for successful island conservation action. As a result, globally threatened seabirds are in a rare situation whereby some of the most intense threats are feasible to mitigate, providing a significant opportunity for important and effective seabird conservation.

## Acknowledgements

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None of this work would have been possible without the strong dedication from the UCSC intern team and the generous data contributions from hundreds of experts around the world for this thesis and for the Threatened Island Biodiversity Database. I am sincerely indebted to my committee members, Donald Croll, Bernie Tershy, and Pete Raimondi as well as to my friends and colleagues in the Ecology and Evolutionary Biology Department at UC Santa Cruz. Funding was generously provided by the Coastal Conservation Action Lab, the Packard Foundation, Island Conservation, the Friends of Long Marine Lab, and the Dr Earl H. Myers and Ethel M. Myers Oceanographic and Marine Biology Trust. I would also like to thank the University of Washington's Friday Harbor Laboratories for offering their beautiful library to me during my final days of editing this manuscript.

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## **Introduction**

Seabirds are important to both marine and terrestrial ecosystems, playing key regulatory roles on islands (Anderson & Polis 1999; Croll et al. 2005; Smith et al. 2011), in nearshore marine systems (Kurle et al. 2008), and at sea where they may consume 7% of marine primary productivity; slightly less than global commercial fisheries (Brooke 2004). They also provide important ecosystem services. Seabirds are indicators of fish schools for human fishers (Hebshi et al. 2008), food for indigenous harvesters (Klein et al. 2010), guano for fertilizer (Sekercioglu 2010), and as an attraction for eco-tourists (Sanson 1994; Wilson & Tisdell 2002).

Most of the 346 recognized species of seabird nest in colonies on islands (commonly referred to as “seabird islands” (Mulder et al. 2011)) where they exhibit strong natal philopatry (Gaston 2004; Anderson & Mulder 2011). The majority of these species evolved as island breeders without predation or disturbance from terrestrial predators or humans. Unfortunately, these threats are now frequently found on even the most isolated islands and have been linked to seabird local declines, extirpations, and global extinctions (Blackburn et al. 2004; BirdLife International 2012; Croxall et al. 2012). Indeed, seabirds account for 25% of all marine extinctions and are the most endangered of all marine groups (Dulvy et al. 2003; IUCN 2012), with 101 species (29%) currently listed as threatened in the International Union for the Conservation of Nature’s (IUCN) Red List of Threatened Species, 98 of which breed on islands (IUCN 2012; Croxall et al. 2012). While seabirds are exposed to



threats across their at-sea foraging range, threats are particularly concentrated on island breeding sites (Nettleship et al. 1995; Croxall et al. 2012; Lewison et al. 2012).

Fortunately, threats to seabirds can also be most easily identified and mitigated on islands (Simberloff 2010; Jones et al. 2011). Conservation solutions such as invasive alien species eradication can mitigate their direct and indirect impacts, while the establishment of legal protected areas can mitigate human threats such as disturbance and land conversion. Collectively, these conservation actions have led to successful recovery of a number of seabird species, often for relatively low costs (James et al. 1999a; Wilson et al. 2005; Aguirre-Muñoz et al. 2008; Brooke et al. 2008; Jones et al. 2011; Lotze et al. 2011; Whitworth et al. 2013). Still, there are over 400,000 potential islands for targeted conservation action globally (UNEP-WCMC 2013) with limited available funding. Given the extraordinary extinction risk faced by many seabirds, the logical approach is for conservation planners to focus efforts on the islands where they can have the largest impacts at the lowest costs (Myers et al. 2000; Margules & Pressey 2000; Wilson et al. 2006; Brooks et al. 2006).

While seabirds are relatively well-studied and their general threats are known (Schreiber & Burger 2002; Vie et al. 2008; Croxall et al. 2012), effective conservation planning has been hampered by a lack of information on which islands currently or historically held populations of the world's most threatened seabirds and which islands harbor threats. This task requires the knowledge and organization of biogeographical information, which are missing for most of the world's taxa

(Margules & Pressey 2000; Kier et al. 2009). We conducted a systematic review and analyzed a newly compiled database of: 1) all known current and historic breeding islands for the world's 98 threatened island-breeding seabird species as categorized on the IUCN Red List; 2) the physical and political attributes of each island; and, 3) the presence and extent of invasive alien species, human populations, and protected areas on islands with histories of breeding populations. We then used these data to identify islands where conservation actions are likely to be most feasible to implement.

## **Methods**

### **Identifying Threatened Seabird Species**

We used the taxonomy and threat status designations on the IUCN Red List by BirdLife International (2012) and determined the island breeding locations of the 98 insular-breeding threatened seabird species (critically endangered, endangered and vulnerable). Taxa reported in the literature not treated at the species level by BirdLife International (2012) were considered subspecies of the relevant species (e.g. Eastern Rockhopper Penguin *Eudyptes (chrysocome) filholi* was treated as a subspecies of Southern Rockhopper Penguin *E. chrysocome*). Any threatened seabirds not breeding on islands were excluded from the analysis.

### **Identifying Threatened Seabird Islands**

A seabird species breeding on an island was considered one population, regardless if multiple sub-populations or colonies existed on the island. We used an

explicit search protocol to identify each insular breeding population for each species. Identified populations were grouped into 3 breeding status categories: extant, potentially extant, or extirpated (Table 1). Cases where data were insufficient to determine evidence of breeding, or where we were unable to identify the specific breeding island were excluded from the analysis.

**Table 1: Definitions of the breeding status assigned to each seabird species breeding on each island.**

Breeding Status	Definition
Extant	Evidence of the species breeding on the island at least once since 1990 and no extirpation yet documented
Potentially Extant	Species extant before 1990 but current status is unclear: no breeding surveys conducted, monitoring outcome inconclusive, or unclear if monitored
Extirpated	Species currently absent from island but was historically extant and experts or literature verify extirpation

To identify islands with threatened breeding seabirds (hereafter, threatened seabird islands), we extracted data from the BirdLife International Datazone ([birdlife.org/datazone](http://birdlife.org/datazone)) and references therein, and from additional web-based searches for published and unpublished literature and reports. Our search terms included the species name (English common name and scientific name attempted separately), “breeding”, “nesting”, “island”, “protection”, “report”, “management”, and “conservation” in all possible combinations. We used the results to identify at least one expert for each species to review and determine the validity of the information we collected. In total, we received data from 150 experts. All data were

compiled in the Threatened Island Biodiversity Database available at [tib.islandconservation.org](http://tib.islandconservation.org) (TIB 2012). Each threatened seabird island was linked to the Global Island Database (GID) (UNEP-WCMC 2013), utilizing a unique identification number and spatial reference for each island. We examined patterns of seabird distribution of by calculating the number of threatened seabird islands by latitude and tested for significant latitudinal patterns with a chi-square test, using an even distribution of threatened seabird breeding islands across latitudes as the null model (JMP).

We determined sovereignty (United Nations 2013) and 2011 Gross National Income (GNI) per capita (in US\$; [data.worldbank.org](http://data.worldbank.org)). We included Taiwan and Antarctica as independent units with high income (The World Bank 2013). Income level in Antarctica was based on the GNI of the seven claimant nations, which were all high income (CIA 2013). We examined the proportion of total threatened seabird islands across different income levels and used chi-square tests to test for significant patterns, expecting that islands would be evenly distributed across possible categories. We also determined which islands contained Important Bird and Biodiversity Area (IBAs), which recognize important areas for birds using standardized quantitative criteria (BirdLife International 2013).

## **Identifying Threatened Seabird Islands With and Without Invasive Species and Legal Protection**

Invasive alien species (hereafter IAS) are species whose introduction and/or spread outside their natural distribution has been documented as negatively impacting native biodiversity (Convention on Biological Diversity 2013). IAS are known to be one of the most important threats to seabirds, and one that it is feasible to address through eradications or control (Clout & Veitch 2002; Keitt et al. 2011; Croxall et al. 2012). This analysis focused only on invasive alien vertebrates and invertebrates that were identified in the literature to have a direct or indirect impact to seabirds and to have established eradication tools that can remove the species from an island. Hereafter we defined IAS as any carnivorous or omnivorous vertebrate, any "aggressive" carnivorous invertebrate (i.e. *Solenopsis* spp.), or any herbivorous mammal (Duffy 1984; Furness 1988; McChesney & Tershy 1998; Courchamp et al. 2003; Platenberg et al. 2005; Jones et al. 2008; Plentovich et al. 2008; Russell & Corre 2009; Towns et al. 2012; New Zealand Department of Conservation 2013). We presumed that if any of these IAS were present on an island it was threatening the co-occurring seabird population.

For each threatened seabird island, we determined if IAS were confirmed or suspected as present, present yet subject to an on-going eradication, absent, or unknown if present. We cross-referenced IAS data from the Global Invasive Species Database (ISSG 2005) with our list of islands and subsequently conducted systematic web-based searches using combinations of the island name with the list of common invasive species as identified in the ISSG. In addition, we contacted and received data from 98 global experts. Threatened seabird islands were counted as IAS-free if

IAS were completely absent or if an island-wide eradication was underway where all IAS would be removed. Threatened seabird islands were considered with IAS present if IAS were confirmed or suspected to be present or if there was an on-going eradication but not all IAS would be removed. For IAS classified as unknown, we took a precautionary approach and considered IAS present. Data were compiled into the Threatened Island Biodiversity Database available at [tib.islandconservation.org](http://tib.islandconservation.org) (TIB 2012).

Legal protection can help to reduce threats from human disturbance or land conversion (James et al. 1999b; Wilson et al. 2005), both of which are known to impact seabirds at their breeding sites (Croxall et al. 2012). We downloaded protected area size and location from Protected Planet (2013; [protectedplanet.net](http://protectedplanet.net)), housed by the World Database on Protected Areas (WDPA) (IUCN & UNEP 2009). To assess the coverage of threatened seabird islands by protected areas, we conducted a spatial join in ArcGIS v. 10.1 (Esri). Due to error associated with the spatial resolution of the two datasets, identified islands with >90% of its area covered by designated protections were deemed fully protected; all other threatened seabird islands were considered not protected (even if partially overlapped by protected areas). We excluded any protection that was strictly marine or given a status other than “designated” (such as “proposed”). We only included protected areas designated with national, legal-based protections. We excluded international protections from the analysis because often no regulatory power to enforce protection exists at these sites (Dudley 2008; Jenkins & Joppa 2010).

## **Identifying Threatened Seabird Islands with High Opportunity for Conservation Action**

We examined where opportunities for threatened seabird conservation existed when protection and eradication could be planned in tandem. We recorded how many threatened seabird islands with and without invasive species and legal protection could benefit from eradication, the establishment of formal legal protection, or both at the whole-island scale. We then examined which threatened seabird islands may be most feasible for conservation given human populations on the islands. Previous studies have shown human population size plays a dominant role in the feasibility and success of conservation actions on islands (Brooke et al. 2007; Pressey et al. 2007; Oppel et al. 2011; Harris et al. 2011; Glen et al. 2013). Successful eradications have occurred on islands with few or no human inhabitants (Glen et al. 2013). Protected area effectiveness (which is influenced by the attitudes and activities of local communities) and costs of establishment and management are also positively correlated with human population size (James et al. 1999b; Andrade & Rhodes 2012). Thus, to identify feasible conservation targets, we determined the number of human inhabitants on each threatened seabird island using the most recent censuses (through 2012) from government reports, literature and websites. Because not all islands have a census or precise estimate of human inhabitants, we pooled human population sizes into ordinal categories of 0, 1-1,000, >1,000 or not found. We considered the first two categories most feasible for conservation actions, the 1-1,000 category was a proxy

for intensity of human impact on conservation efforts (James et al. 1999b; Oppel et al. 2011; Andrade & Rhodes 2012; Glen et al. 2013).

## **Results**

### **The Global Distribution of Threatened Seabirds**

For the 98 threatened insular seabird species, we identified 1,362 populations breeding on 968 islands. Of these, 1,266 were extant populations breeding on 890 islands and 96 were extirpated populations from 90 islands (9.3% of threatened seabird islands contained extirpated populations; 31 species) (Fig. 1, Appendix 1). Breeding locations remained unconfirmed for four threatened seabird species (Appendix 1), but there was sufficient anecdotal evidence to identify their most likely islands.

Threatened seabird islands contained 1-9 (mean (SD) = 1.41 (1.02), median = 1) extant seabird species. Each species had extant populations on 1-90 (mean (SD) = 12.9 (18.3), median = 6) islands (Fig. 2, Appendix 1). Twenty one species (21%) were extant on a single island; 4 of these species historically bred on more than 1 island (Appendix 1).

### **Threatened Seabird Island Attributes**

Threatened seabird islands ranged in size from 0.00001 km<sup>2</sup> to 149,955 km<sup>2</sup> (Hangklip Rocks, South Africa to South Island, New Zealand) but 57% were <1km<sup>2</sup> (median = 0.57 km<sup>2</sup>, mode = 0.0031 km<sup>2</sup>; Fig. 3, Appendix 2). Significantly more



islands were located in the southern hemisphere (Pearson  $\chi^2 = 65.6$ ,  $df = 1$ ,  $<.0001$ ; median =  $34^\circ\text{S}$ ; mode =  $52^\circ$ ; Fig. 1) and most islands were south of the tropics (Pearson  $\chi^2 = 205.34$ ,  $df = 2$ ,  $<.0001$ ; Fig. 1). Threatened seabird islands occurred within 47 countries and were significantly likely to be owned by countries designated as high and middle (929 of 968, 96%) vs. lower middle and low income (Pearson  $\chi^2 = 1286.19$ ,  $df = 3$ ,  $<.0001$ ; Fig. 4a). The majority of threatened seabird populations were also found in these high and middle-income categories (Fig. 4b). Important Bird and Biodiversity Areas were found on 745 threatened seabird islands (77%, or 81% excluding 53 islands in 6 countries for which IBAs have not yet been identified or for which spatial data are not yet available).

## **Invasive Alien Species and Lack of Legal Protection on Threatened Seabird Islands**

Of the 968 islands with threatened seabird populations, 803 (83%) were identified with invasive alien species (IAS) present and/or adequate legal protection missing; at least one population of all 98 threatened seabird species breed on at least one of these islands. IAS were considered absent on 388 threatened seabird islands (40%; either no IAS were present or an on-going eradication of all IAS on the island was taking place). IAS were considered present (confirmed or suspected) on 359 threatened seabird islands (37 %). Ninety seabird species (92% of all island-breeding threatened seabird species) were breeding on at least one of the islands with IAS present; 23 species had 100% of their population(s) on these islands. The number of

known IAS species on threatened seabird islands was variable (range = 1-26, mean (SD) = 3.7 (3.9), Median = 2) and was significantly positively correlated with island area (Linear regression:  $r^2_{(362)} = 0.42$ ,  $F = 264.1$ ,  $p < .01$ ) and human population (Linear regression:  $r^2_{(311)} = .48$ ,  $F = 288.6$ ,  $p < .01$ ). The most common IAS were rodents, cats and ungulates (Table 2).

Data on IAS presence or absence was lacking from 221 threatened seabird islands (23%). Using the precautionary approach and assuming IAS are present on islands lacking data, the number of threatened seabird islands that presumably had IAS increased to 580 (60%). This increased the number of seabirds considered to co-occur with IAS on an island to 91 species (93%), with 29 of these species having 100% of their population(s) on an island with IAS present (Fig. 5).

**Table 2: The most common invasive alien species (IAS) on islands with globally threatened seabirds.**

Invasive Type	# islands (% of islands with known IAS present)	# Archipelagos	# Countries
Rodent	290 (80%)	153	34
Cat	138 (38.4%)	87	27
Ungulate	127 (35.4%)	84	27
All islands with IAS	359 (37.1% of all islands)	173	36

Only 359 (37%) threatened seabird islands had >90% of their area formally protected; 534 islands (55%) had no legal protection and 75 islands (8%) were only partially protected (<90%). Therefore, 609 threatened seabird islands (63%)

represent potential targets for protected area establishment or expansion (Appendix 2). Ninety species (58% of all island-breeding threatened seabird species) were breeding on at least one of these 609 islands including 43 species with 100% of their breeding populations legally unprotected (Fig. 5).

## **Conservation Opportunities**

The majority of threatened seabird islands were uninhabited (74%) or had 1-1,000 human inhabitants (14%), making 854 seabird breeding islands (88%) potentially feasible places for future or continued conservation efforts (Figs. 6, 7). Therefore, of the 803 islands considered to have IAS present and/or lacking adequate legal protection, 690 (86%, or 71% of all seabird breeding islands) were potentially feasible for eradication and/or protected area establishment. One hundred sixty-five threatened seabird islands were already legally protected and IAS-free, (Fig. 6, Appendix 2), with 46 threatened seabird species (221 populations (17%)) breeding on them. Of these, 164 (1 island lacked human census data) were identified as feasible places to maintain (or enhance) protected area effectiveness and to prevent IAS establishment (Fig. 6, Appendix 2). Combined, these 854 islands supported at least one population of 85 species (87% of all threatened seabird species), and 86% of these islands were also in relatively high income countries. The 13 remaining species (13% of all threatened seabird species) had 100% of their extant populations restricted to one or more islands with greater than 1,000 people (Fig. 8); these islands

contained IAS, lacked adequate formal protection and were not considered feasible places for island-wide conservation efforts.

## **Discussion**

The impacts of IAS (predation, competition, habitat degradation, etc.) and habitat conversion and degradation by people are the most significant threats on islands for seabirds, however conservation measures to address them, such as eradications and formal protection, are well-established (Jones et al. 2011; Croxall et al. 2012). Invasive species eradications from islands are increasing in number and rate, and there are now about 20 new successful eradications each year (Keitt et al. 2011). Likewise, between 1990 and 2010, the global proportion of terrestrial protected areas increased from 8.8% to 12.7% (IUCN & UNEP 2009). Unfortunately, much of this protected land is of low biodiversity value and does little to prevent extinctions (Rodrigues et al. 2004; Joppa & Pfaff 2010). Here we document the co-occurrence of threats and seabirds at a moderately fine spatial scale and with discrete boundaries, emphasizing where protection and IAS eradication may be most beneficial for threatened seabird species. Additionally, the majority of these islands have already been globally recognized as important for seabirds by the Important Bird and Biodiversity Area (IBA) program by BirdLife International. This, along with our Threatened Island Biodiversity Database, should further facilitate global recognition of important seabird islands to enable needed conservation efforts.

There is a range of different factors that may go into the budget of an eradication or establishment and management of a formal protection plan, which can also affect mitigation effectiveness across sites (James et al. 1999b; Donlan & Wilcox 2007). However, prior studies have found that successful conservation actions at relatively low costs were directly related to human presence and compliance and country income levels for both eradication and formal protection establishment and management plans (James et al. 1999b; Nuñez & Pauchard 2009; Andrade & Rhodes 2012; Glen et al. 2013). For eradication projects, smaller islands also tended to be less costly and easier to manage (Howald et al. 2007; Keitt et al. 2011). Our results indicate that there is a clear opportunity for feasible and effective conservation action on threatened seabird islands. The majority of globally threatened seabirds breed on islands that have few or no people living on them, are significantly more likely to occur in or to be owned by high or upper middle income countries and are less than a square kilometer in area. Therefore, capacity and resources potentially exist to restore, protect, and manage threatened seabirds.

However, 23 seabird species had  $\geq 50\%$  of their populations on islands with  $>1,000$  people (Fig. 8). Such cases may represent significant challenges for seabird conservation, particularly those that are truly unrealistic for island-wide conservation actions due to both the size of the island and the very large human population living on it (e.g. Jamaica, New Zealand's South and North Islands, Hispaniola, etc.). The conservation of some of these species may be most practical on the subset of islands on which they breed with lower (or no) human populations, although it will be

important to consider the relative sizes of seabird populations on different islands. For the 13 species restricted to one or more of the 14 identified islands with >1,000 people (3 of which are in lower income countries: Papua New Guinea, Fiji, Jamaica), it may be appropriate to consider translocation or re-introduction of the species to nearby uninhabited islands or historic breeding islands (if any exist, are known and are potentially suitable). Alternatively, it may be appropriate to consider controlling invasive alien species locally, or eradicating them from part rather than the entire extent of an island, combined with construction of predator-proof fences (e.g. Jones et al. 2011; Jones & Kress 2012; Carlile et al. 2012; Pala 2012) .

In total, 143 islands (15%) supporting threatened seabirds have undergone at least one successful eradication (Island Conservation 2012). Of these islands, 42 are now free of IAS and are legally protected (e.g. many of California's Channel Islands, Mexico's Midriff Islands, Ecuador's Galapagos Islands, and New Zealand's offshore islands). The majority of seabird islands that still maintain IAS populations support invasive rodents, cats, or ungulates: species that have been the subject of numerous successful removals globally (Keitt et al. 2011).

## **Data Gaps**

The impacts of IAS (predation, competition, habitat degradation, etc.) and habitat conversion and degradation by people are the most significant threats on islands for seabirds, however conservation measures to address them, such as eradications and formal protection, are well-established (Jones et al. 2011; Croxall et al. 2012).

Invasive species eradications from islands are increasing in number and rate, and there are now about 20 new successful eradications each year (Keitt et al. 2011). Likewise, between 1990 and 2010, the global proportion of terrestrial protected areas increased from 8.8% to 12.7% (IUCN & UNEP 2009). Unfortunately, much of this protected land is of low biodiversity value and does little to prevent extinctions (Rodrigues et al. 2004; Joppa & Pfaff 2010). Here we document the co-occurrence of threats and seabirds at a moderately fine spatial scale and with discrete boundaries, emphasizing where protection and IAS eradication may be most beneficial for threatened seabird species. Additionally, the majority of these islands have already been globally recognized as important for seabirds by the Important Bird and Biodiversity Area (IBA) program by BirdLife International. This, along with our Threatened Island Biodiversity Database, should further facilitate global recognition of important seabird islands to enable needed conservation efforts.

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indicate that there is a clear opportunity for feasible and effective conservation action on threatened seabird islands. The majority of globally threatened seabirds breed on islands that have few or no people living on them, are significantly more likely to occur in or to be owned by high or upper middle income countries and are less than a square kilometer in area. Therefore, capacity and resources potentially exist to restore, protect, and manage threatened seabirds.

However, 23 seabird species had  $\geq 50\%$  of their populations on islands with  $>1,000$  people. Such cases may represent significant challenges for seabird conservation, particularly those that are truly unrealistic for island-wide conservation actions due to both the size of the island and the very large human population living on it (e.g. Jamaica, New Zealand's South and North Islands, Hispaniola, etc.). The conservation of some of these species may be most practical on the subset of islands on which they breed with lower (or no) human populations, although it will be important to consider the relative sizes of seabird populations on different islands. For the 13 species restricted to one or more of the 14 identified islands with  $>1,000$  people (3 of which are in lower income countries: Papua New Guinea, Fiji, Jamaica), it may be appropriate to consider translocation or re-introduction of the species to nearby uninhabited islands or historic breeding islands (if any exist, are known and are potentially suitable). Alternatively, it may be appropriate to consider controlling invasive alien species locally, or eradicating them from part rather than the entire extent of an island, combined with construction of predator-proof fences (e.g. Jones et al. 2011; Jones & Kress 2012; Carlile et al. 2012; Pala 2012) .

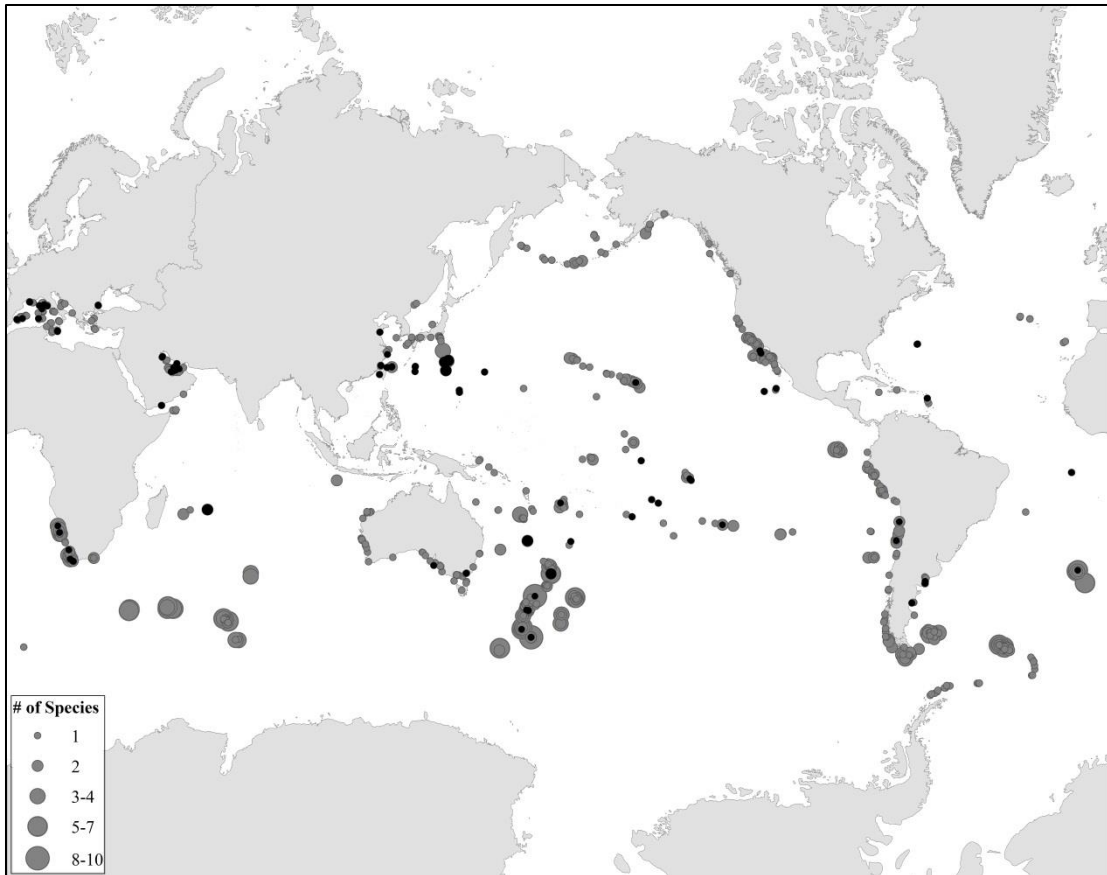


In total, 143 islands (15%) supporting threatened seabirds have undergone at least one successful eradication (Island Conservation 2012). Of these islands, 42 are now free of IAS and are legally protected (e.g. many of California's Channel Islands, Mexico's Midriff Islands, Ecuador's Galapagos Islands, and New Zealand's offshore islands). The majority of seabird islands that still maintain IAS populations support invasive rodents, cats, or ungulates: species that have been the subject of numerous successful removals globally (Keitt et al. 2011).

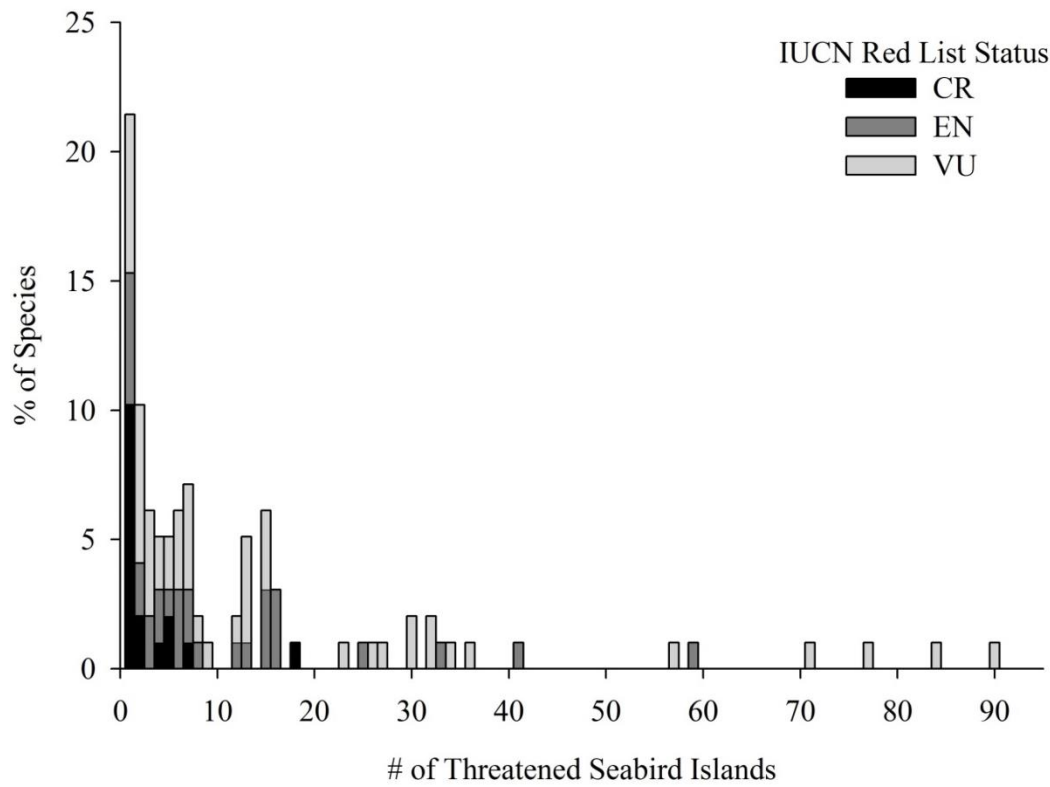
## **Conclusion**

Our analysis was the first of its kind to compile a global database on the distribution and location of globally threatened seabird species on islands and to match the presence or absence of threatening invasive alien species and formal protection. We found that islands used by threatened seabirds are primarily small with few inhabitants, are concentrated in the southern hemisphere, and occur in relatively wealthy countries. This is unique given the majority of threatened biodiversity are found in low-income countries and is typically concentrated in the tropics (Hoffman et al. 2010) and in areas with substantial human population pressure (Cincotta et al. 2000) thereby accruing high opportunity costs for conservation. Therefore, while seabirds are extraordinarily threatened, they represent a remarkable conservation opportunity.

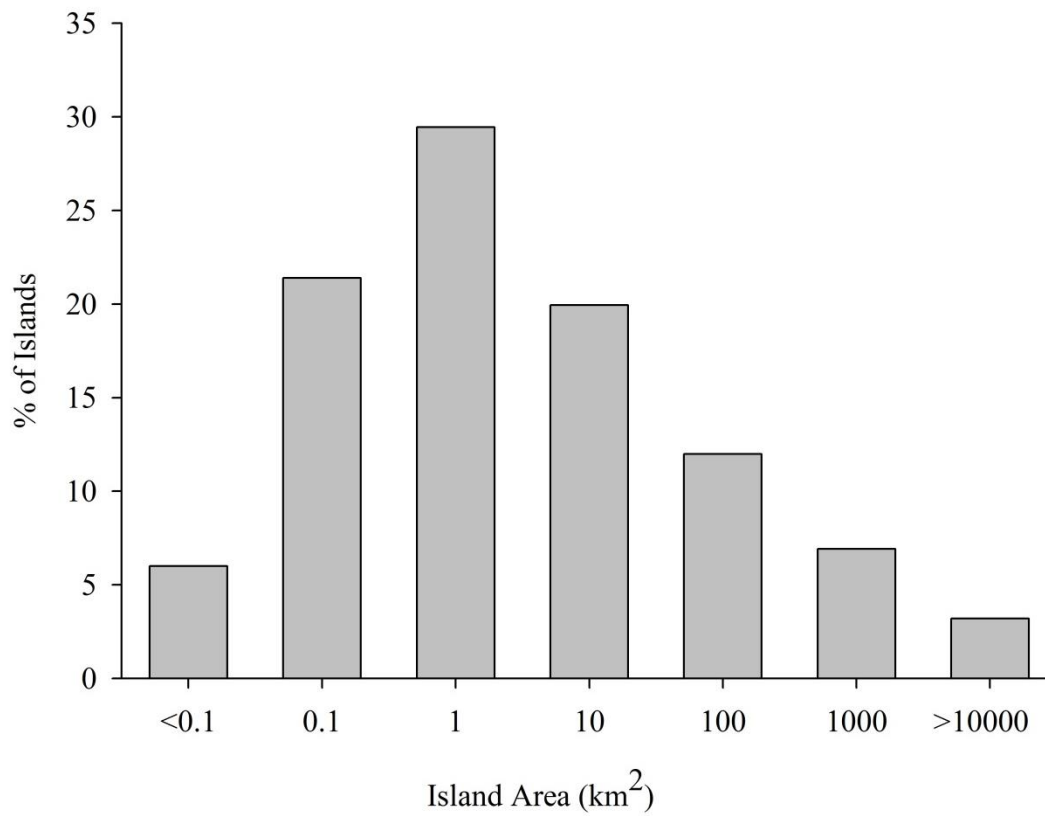
**Figure 1: A global map of threatened seabird islands. Dark gray dots represent all seabird populations scaled by the number of species on each island. Black dots use the same scaling units but indicate islands with extirpated populations.**



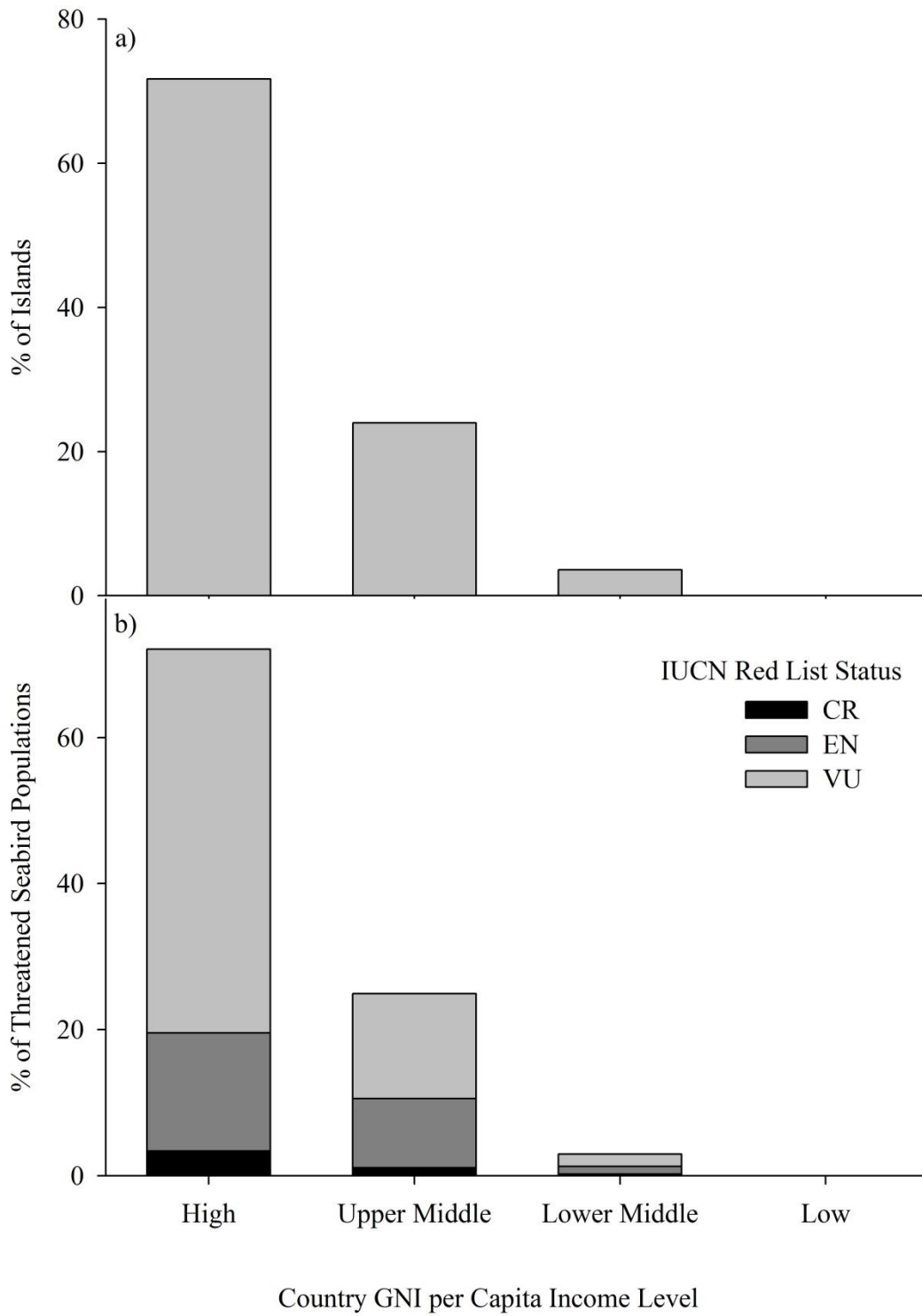
**Figure 2: Relative endemism of threatened seabirds by IUCN Red List Status.**



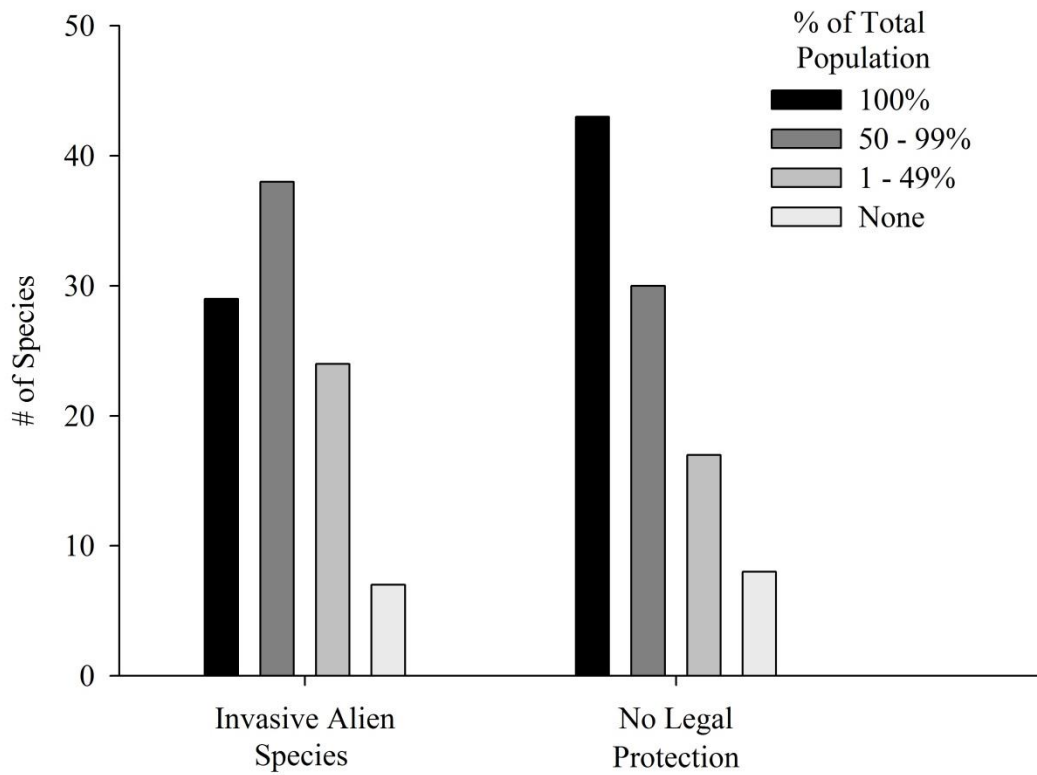
**Figure 3: The percent of all seabird islands by size (km<sup>2</sup>) (Log<sub>10</sub> transformed +1)**



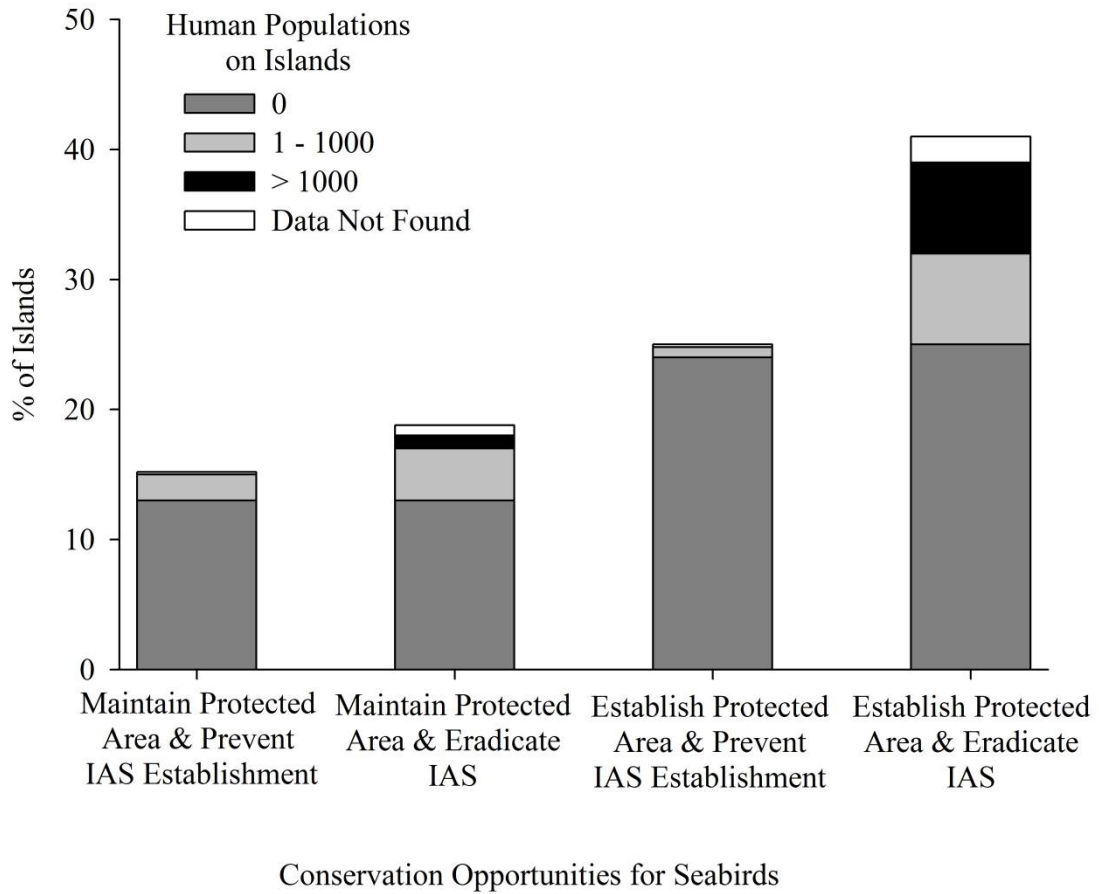
**Figure 4: Percent of islands (a) and seabird populations (b) in countries with different Gross National Income (GNI) levels.**



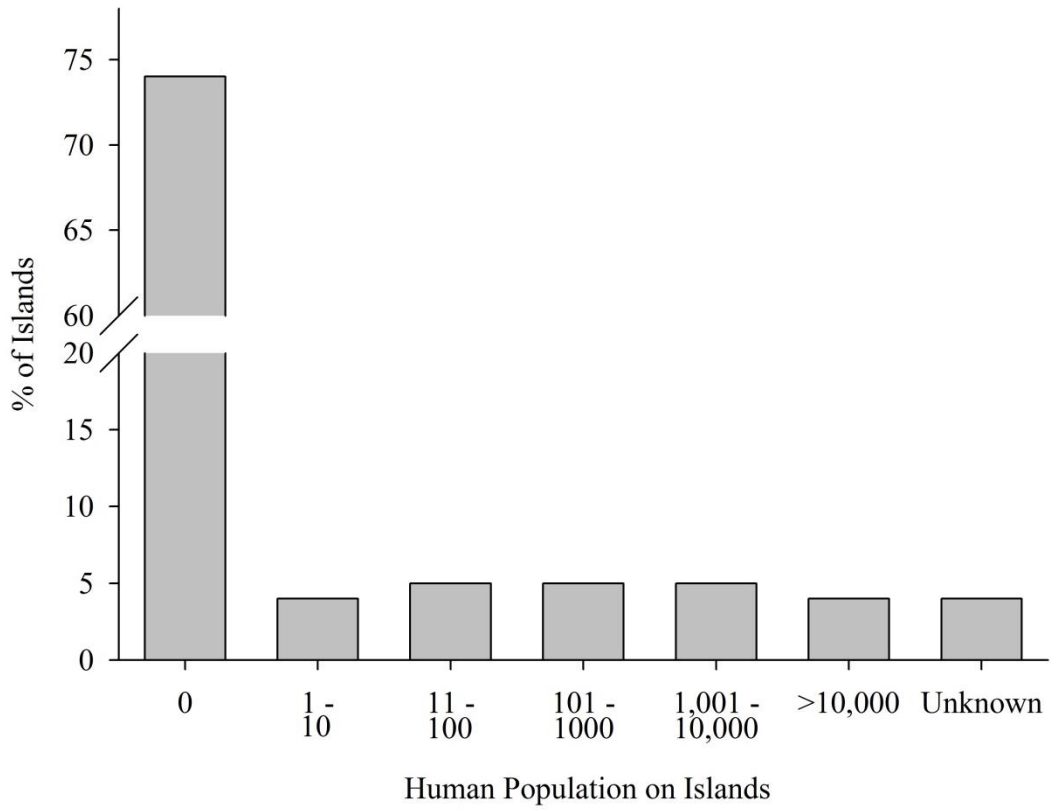
**Figure 5: Number of threatened seabird species with 100%, 50-99%, 1-49%, or 0% (“None”) of their total breeding populations on islands with invasive alien species and/or lack of legal protection.**



**Figure 6: Conservation opportunities for seabirds on the 968 seabird islands broken down by human populations (an indicator of conservation feasibility)**

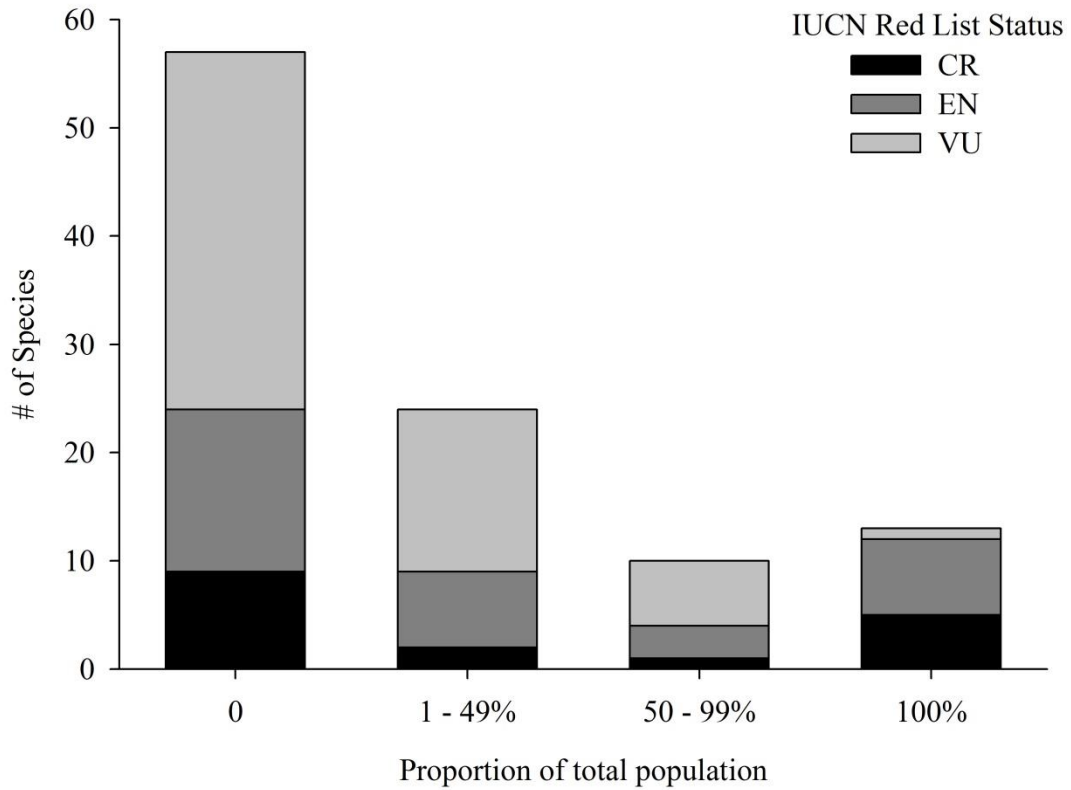


**Figure 7: Percent of identified islands within human population categorical bins.**





**Figure 8: For islands with >1000 people, the number of extant threatened seabird species by the proportion of the total breeding populations on each island and IUCN Red List Status.**



Appendix 1. The 98 island-breeding threatened seabird species and the number of islands they breed on (broken up by breeding status category and sorted by family).

Threatened Seabird Species				# of Islands		
Family	Scientific Name	Common Name	IUCN Red List Status	# Extant	# Potentially Extant	# Extirpated
Alcidae	<i>Brachyramphus brevirostris</i>	Kittlitz's Murrelet	CR	3	1	0
Alcidae	<i>Brachyramphus marmoratus</i>	Marbled Murrelet	EN	11	2	0
Alcidae	<i>Synthliboramphus craveri</i>	Craveri's Murrelet	VU	11	12	0
Alcidae	<i>Synthliboramphus hypoleucus</i>	Xantus's Murrelet	VU	25	1	0
Alcidae	<i>Synthliboramphus</i>	Japanese Murrelet	VU	12	17	2
Diomedeidae	<i>Diomedea amsterdamensis</i>	Amsterdam Albatross	CR	1	0	0
Diomedeidae	<i>Diomedea antipodensis</i>	Antipodean Albatross	VU	7	0	0
Diomedeidae	<i>Diomedea dabbenena</i>	Tristan Albatross	CR	2	0	0
Diomedeidae	<i>Diomedea epomophora</i>	Southern Royal	VU	5	0	0
Diomedeidae	<i>Diomedea exulans</i>	Wandering Albatross	VU	23	13	9
Diomedeidae	<i>Diomedea sanfordi</i>	Northern Royal	EN	5	1	0
Diomedeidae	<i>Phoebastria albatrus</i>	Short-tailed Albatross	VU	6	1	0
Diomedeidae	<i>Phoebastria irrorata</i>	Waved Albatross	CR	2	0	0
Diomedeidae	<i>Phoebastria nigripes</i>	Black-footed Albatross	VU	32	2	0
Diomedeidae	<i>Phoebetria fusca</i>	Sooty Albatross	EN	11	4	0
Diomedeidae	<i>Thalassarche carteri</i>	Indian Yellow-nosed	EN	7	0	0
Diomedeidae	<i>Thalassarche chlororhynchos</i>	Atlantic Yellow-nosed	EN	6	0	10
Diomedeidae	<i>Thalassarche chrysostoma</i>	Grey-headed Albatross	VU	28	4	0
Diomedeidae	<i>Thalassarche eremita</i>	Chatham Albatross	VU	1	0	0

Diomedidae	<i>Thalassarche impavida</i>	Campbell Albatross	VU	2	0	1
Diomedidae	<i>Thalassarche melanophrys</i>	Black-browed Albatross	EN	55	4	0
Diomedidae	<i>Thalassarche salvini</i>	Salvin's Albatross	VU	11	1	0
Fregatidae	<i>Fregata andrewsi</i>	Christmas Island	CR	1	0	1
Fregatidae	<i>Fregata aquila</i>	Ascension Frigatebird	VU	1	0	0
Hydrobatidae	<i>Nesofregatta fuliginosa</i>	White-throated Storm-petrel	EN	9	7	0
Hydrobatidae	<i>Oceanites maorianus</i>	New Zealand Storm-petrel	CR	1	0	0
Hydrobatidae	<i>Oceanodroma homochroa</i>	Ashy Storm-petrel	EN	29	4	0
Hydrobatidae	<i>Oceanodroma macrodactyla</i>	Guadalupe Storm-petrel	CR	0	1	0
Hydrobatidae	<i>Oceanodroma monteiroi</i>	Monteiro's Storm-petrel	VU	5	0	6
Laridae	<i>Larus atlanticus</i>	Olrog's Gull	VU	15	0	0
Laridae	<i>Larus bulleri</i>	Black-billed Gull	EN	2	0	0
Laridae	<i>Larus fuliginosus</i>	Lava Gull	VU	7	8	3
Laridae	<i>Rissa brevirostris</i>	Red-legged Kittiwake	VU	15	0	2
Laridae	<i>Sterna albostriata</i>	Black-fronted Tern	EN	1	0	0
Laridae	<i>Sterna bernsteini</i>	Chinese Crested Tern	CR	7	0	3
Laridae	<i>Sterna lorata</i>	Peruvian Tern	EN	1	0	0
Laridae	<i>Sterna nereis</i>	Fairy Tern	VU	84	6	0
Pelecanoididae	<i>Pelecanoides garnotii</i>	Peruvian Diving-petrel	EN	7	8	2
Phalacrocoracidae	<i>Leucocarbo campbelli</i>	Campbell Island Shag	VU	1	7	1
Phalacrocoracidae	<i>Leucocarbo carunculatus</i>	New Zealand King Shag	VU	7	2	3
Phalacrocoracidae	<i>Leucocarbo chalconotus</i>	Stewart Island Shag	VU	11	2	0
Phalacrocoracidae	<i>Leucocarbo colensoi</i>	Auckland Islands Shag	VU	4	0	0
Phalacrocoracidae	<i>Leucocarbo ranfurlyi</i>	Bounty Islands Shag	VU	13	0	0
Phalacrocoracidae	<i>Phalacrocorax featherstoni</i>	Pitt Island Shag	EN	12	0	0
Phalacrocoracidae	<i>Phalacrocorax harrisi</i>	Flightless Cormorant	VU	2	0	0

Phalacrocoracidae	<i>Phalacrocorax neglectus</i>	Bank Cormorant	EN	37	4	0
Phalacrocoracidae	<i>Phalacrocorax nigrogularis</i>	Socotra Cormorant	VU	25	5	12
Phalacrocoracidae	<i>Phalacrocorax onslowi</i>	Chatham Islands Shag	CR	5	0	3
Procellariidae	<i>Procellaria aequinoctialis</i>	White-chinned Petrel	VU	71	6	0
Procellariidae	<i>Procellaria conspicillata</i>	Spectacled Petrel	VU	1	0	5
Procellariidae	<i>Procellaria parkinsoni</i>	Parkinson's Petrel	VU	2	1	1
Procellariidae	<i>Procellaria westlandica</i>	Westland Petrel	VU	1	0	0
Procellariidae	<i>Pseudobulweria aterrima</i>	Mascarene Petrel	CR	1	0	4
Procellariidae	<i>Pseudobulweria becki</i>	Beck's Petrel	CR	1	0	1
Procellariidae	<i>Pseudobulweria macgillivrayi</i>	Fiji Petrel	CR	1	0	0
Procellariidae	<i>Pterodroma alba</i>	Phoenix Petrel	EN	14	2	0
Procellariidae	<i>Pterodroma arminjoniana</i>	Trindade Petrel	VU	2	0	1
Procellariidae	<i>Pterodroma atrata</i>	Henderson Petrel	EN	3	1	1
Procellariidae	<i>Pterodroma axillaris</i>	Chatham Petrel	EN	3	1	0
Procellariidae	<i>Pterodroma baraui</i>	Barau's Petrel	EN	1	0	0
Procellariidae	<i>Pterodroma cahow</i>	Bermuda Petrel	EN	5	0	0
Procellariidae	<i>Pterodroma caribbaea</i>	Jamaica Petrel	CR	0	1	0
Procellariidae	<i>Pterodroma cervicalis</i>	White-necked Petrel	VU	2	0	1
Procellariidae	<i>Pterodroma cookii</i>	Cook's Petrel	VU	3	0	0
Procellariidae	<i>Pterodroma defilippiana</i>	De Philippe's Petrel	VU	5	1	0
Procellariidae	<i>Pterodroma externa</i>	Juan Fernandez Petrel	VU	1	0	0
Procellariidae	<i>Pterodroma hasitata</i>	Black-capped Petrel	EN	2	1	0
Procellariidae	<i>Pterodroma incerta</i>	Atlantic Petrel	EN	2	1	0
Procellariidae	<i>Pterodroma longirostris</i>	Stejneger's Petrel	VU	1	0	0
Procellariidae	<i>Pterodroma madeira</i>	Zino's Petrel	EN	1	1	0
Procellariidae	<i>Pterodroma magentae</i>	Magenta Petrel	CR	1	0	0
Procellariidae	<i>Pterodroma phaeopygia</i>	Galapagos Petrel	CR	5	0	1

Procellariidae	<i>Pterodroma pycrofti</i>	Pycroft's Petrel	VU	12	1	1
Procellariidae	<i>Pterodroma sandwichensis</i>	Hawaiian Petrel	VU	6	1	0
Procellariidae	<i>Pterodroma solandri</i>	Providence Petrel	VU	2	0	1
Procellariidae	<i>Pterodroma brevipes</i>	Collared Petrel	VU	9	4	1
Procellariidae	<i>Pterodroma leucoptera</i>	Gould's Petrel	VU	6	0	0
Procellariidae	<i>Puffinus auricularis</i>	Townsend's Shearwater	CR	1	0	0
Procellariidae	<i>Puffinus bulleri</i>	Buller's Shearwater	VU	7	0	2
Procellariidae	<i>Puffinus creatopus</i>	Pink-footed Shearwater	VU	3	0	0
Procellariidae	<i>Puffinus heinrothi</i>	Heinroth's Shearwater	VU	1	2	0
Procellariidae	<i>Puffinus huttoni</i>	Hutton's Shearwater	EN	1	0	1
Procellariidae	<i>Puffinus mauretanicus</i>	Balearic Shearwater	CR	18	0	1
Procellariidae	<i>Puffinus newelli</i>	Newell's Shearwater	EN	5	1	11
Procellariidae	<i>Puffinus yelkouan</i>	Yelkouan Shearwater	VU	56	1	0
Spheniscidae	<i>Eudyptes chrysocome</i>	Southern Rockhopper	VU	54	17	0
Spheniscidae	<i>Eudyptes chrysolophus</i>	Macaroni Penguin	VU	63	21	0
Spheniscidae	<i>Eudyptes moseleyi</i>	Northern Rockhopper	EN	7	0	1
Spheniscidae	<i>Eudyptes pachyrhynchus</i>	Fiordland Crested	VU	27	0	0
Spheniscidae	<i>Eudyptes robustus</i>	Snares Crested Penguin	VU	4	0	0
Spheniscidae	<i>Eudyptes schlegeli</i>	Royal Penguin	VU	1	1	0
Spheniscidae	<i>Eudyptes sclateri</i>	Erect-crested Penguin	EN	12	3	0
Spheniscidae	<i>Megadyptes antipodes</i>	Yellow-eyed Penguin	EN	16	0	0
Spheniscidae	<i>Spheniscus demersus</i>	African Penguin	EN	23	2	0
Spheniscidae	<i>Spheniscus humboldti</i>	Humboldt Penguin	VU	32	0	0
Spheniscidae	<i>Spheniscus mendiculus</i>	Galapagos Penguin	EN	8	0	0
Sulidae	<i>Papasula abbotti</i>	Abbott's Booby	EN	1	0	1
Sulidae	<i>Sula capensis</i>	Cape Gannet	VU	6	0	3

Appendix 2: The attributes and potential conservation opportunities on the 968 islands with extant or currently extirpated populations of globally threatened seabirds (sorted by country). GNI Level: Gross National Income Level from the World Bank (2011 estimates). Conservation Opportunity: 1 = maintain protected area & prevent IAS establishment (island is protected, IAS absent); 2 = maintain protected area & eradicate IAS (island is protected, IAS present); 3 = establish protected area & prevent IAS establishment (island is not protected, IAS absent); 4= establish protected area & eradicate IAS (island is not protected, IAS present).

Country	Region/Archipelago	Island	Area (km <sup>2</sup> )	GNI Level	Human Pop	Conservation Opportunity
AE	Persian Gulf	Dayyinah	1.6	High	0	4
AE	Persian Gulf	Hayl	0.6	High	Unknown	4
AE	Persian Gulf	Jabal Dhanna Islet	<0.1	High	0	4
AE	Persian Gulf	Muhammaliya	0.1	High	0	4
AE	Persian Gulf	Sir Abu Nair	14.0	High	Unknown	4
AE	Persian Gulf	Shara'awh (Shara'ah)	0.4	High	0	4
AE	Persian Gulf (Abu Dhabi Islands)	Arzana	4.6	High	Unknown	4
AE	Persian Gulf (Abu Dhabi Islands)	Dalma	29.6	High	>1000	4
AE	Persian Gulf (Abu Dhabi Islands)	Ghaghah	5.7	High	Unknown	4
AE	Persian Gulf (Abu Dhabi Islands)	Ghaghah	0.6	High	Unknown	4
AE	Persian Gulf (Abu Dhabi Islands)	Ghasha (Umm Qassar)	0.5	High	0	4
AE	Persian Gulf (Abu Dhabi Islands)	Ghurab	9.5	High	1 - 1000	4
AE	Persian Gulf (Abu Dhabi Islands)	North Yasat	11.2	High	Unknown	4
AE	Persian Gulf (Abu Dhabi Islands)	Qarnayn	1.8	High	Unknown	4
AE	Persian Gulf (Abu Dhabi Islands)	Qassar Selaha (Salaha)	1.7	High	0	4
AE	Persian Gulf (Abu Dhabi Islands)	Rufayq Rock	0.1	High	0	4
AE	Persian Gulf (Abu Dhabi Islands)	Sinaiya	0.1	High	0	4

AE	Persian Gulf (Abu Dhabi Islands)	South Furaijjidat	0.1	High	0	4
AE	Persian Gulf (Abu Dhabi Islands)	Yasat Judairah	5.6	High	Unknown	4
AE	Persian Gulf (Abu Dhabi Islands)	Zirku (Zarka)	8.1	High	Unknown	4
AL		Sazan	6.0	Lower Middle	0	4
AQ	South Orkney Islands	Mathews	3.3	High	0	3
AQ	South Orkney Islands	Michelsen	2.7	High	0	1
AQ	South Orkney Islands (Laurie Island)	Acuna	0.3	High	0	3
AQ	South Orkney Islands (Laurie Island)	Graptolite	0.2	High	0	3
AQ	South Shetland Islands	Aspland	4.2	High	0	3
AQ	South Shetland Islands	Clarence	104.8	High	0	3
AQ	South Shetland Islands	Elephant	476.1	High	0	3
AQ	South Shetland Islands	Gibbs	26.3	High	0	3
AQ	South Shetland Islands	King George	1148.0	High	1 - 1000	3
AQ	South Shetland Islands	Livingston	839.6	High	1 - 1000	3
AQ	South Shetland Islands	Nelson	166.8	High	1 - 1000	3
AQ	South Shetland Islands	O'Brien	5.2	High	0	3
AQ	South Shetland Islands	Pyramid Stacks	0.1	High	0	3
AQ	South Shetland Islands	Ridley	2.5	High	0	3
AQ	South Shetland Islands	Seal	9.0	High	0	3
AR	Bahia Blanca	Brightman	0.1	Upper Middle	0	4
AR	Bahia Blanca	Canal Ancla	21.0	Upper Middle	0	4
AR	Bahia Blanca	Embudo	0.6	Upper Middle	0	3
AR	Bahia Blanca	Puerto	3.4	Upper Middle	0	4

AR	Bahia Blanca	Tres Brazas & Golfada Chica	11.6	Upper Middle	0	4
AR	Bahia Blanca	Trinidad Islet	<0.1	Upper Middle	0	2
AR	Bahia San Blas	Arroyo Jabali Oeste	0.1	Upper Middle	0	4
AR	Bahia San Blas	Banco Nordeste	20.7	Upper Middle	0	4
AR	Bahia San Blas	Gama	22.8	Upper Middle	1 - 1000	4
AR	Bahia San Blas	Norte de Morro de Indio	0.6	Upper Middle	0	4
AR	Bahia Union	Gaviota	2.8	Upper Middle	0	4
AR	Chubut	Felipe	0.6	Upper Middle	0	4
AR	Chubut	Sin Nombre	0.1	Upper Middle	0	4
AR	Chubut (Islas Lagunas)	Laguna	0.2	Upper Middle	0	4
AR	Chubut (Islas Lagunas)	Luisoni	0.4	Upper Middle	0	4
AR	Chubut (Islas Vernaci)	Vernaci Noroeste	0.1	Upper Middle	0	4
AR	Chubut (Islas Vernaci)	Vernaci Oeste Noroeste	<0.1	Upper Middle	0	4
AR	Chubut (Islas Vernaci)	Vernaci Sudoeste	0.2	Upper Middle	0	4
AR	Patagonia	Isla de los Estados	534.1	Upper Middle	1 - 1000	2
AR	Puerto Deseado	Pinguino	0.7	Upper Middle	0	3
AU		Christmas	142.1	High	>1000	4
AU	Abrolhos Islands	Rat	0.5	High	Unknown	4
AU	Abrolhos Islands (Easter Group)	Byone	0.2	High	0	4
AU	Abrolhos Islands (Easter Group)	Campbell	0.1	High	0	4
AU	Abrolhos Islands (Easter Group)	Gilbert	<0.1	High	0	4
AU	Abrolhos Islands (Easter Group)	Helms	<0.1	High	0	4
AU	Abrolhos Islands (Easter Group)	Keru	<0.1	High	0	4
AU	Abrolhos Islands (Easter Group)	Little North	<0.1	High	0	4



AU	Abrolhos Islands (Easter Group)	Sandy	<0.1	High	0	4
AU	Abrolhos Islands (Easter Group)	Serventy	0.2	High	0	4
AU	Abrolhos Islands (Easter Group)	Shearwater	<0.1	High	0	4
AU	Abrolhos Islands (Easter Group)	Tapani	0.1	High	0	4
AU	Abrolhos Islands (Easter Group)	White	<0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Burnett	<0.1	High	Unknown	4
AU	Abrolhos Islands (Pelsaert Group)	Coronation	<0.1	High	Unknown	4
AU	Abrolhos Islands (Pelsaert Group)	Fairbridge	0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Gregory	<0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Gun	0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Lagoon	<0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Murray	<0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Newman	0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Pelsaert	3.9	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Post Office	0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Square	0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Stick	<0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	The Coral Patches	<0.1	High	0	4
AU	Abrolhos Islands (Pelsaert Group)	Uncle Margie (Mangrove)	<0.1	High	0	4
AU	Abrolhos Islands (Wallabi Group)	Beacon	<0.1	High	0	4
AU	Abrolhos Islands (Wallabi Group)	Dick	<0.1	High	0	4
AU	Abrolhos Islands (Wallabi Group)	East Wallabi	4.0	High	0	4
AU	Abrolhos Islands (Wallabi Group)	Long	0.4	High	0	4
AU	Abrolhos Islands (Wallabi Group)	North	1.8	High	1 - 1000	4

AU	Abrolhos Islands (Wallabi Group)	Third Sister	<0.1	High	0	4
AU	Abrolhos Islands (Wallabi Group)	West Wallabi	6.8	High	0	3
AU	Beachport	Cowrie	0.1	High	0	2
AU	Coorong	Cow	0.2	High	0	2
AU	Coorong	Goat	0.1	High	0	2
AU	Coorong	Mellor	<0.1	High	0	1
AU	Coorong	Seagull Reef	<0.1	High	0	1
AU	Coorong	South Reef	<0.1	High	0	1
AU	Coorong	Teal	<0.1	High	0	1
AU	Coorong	Unnammed 1	<0.1	High	0	2
AU	Coorong	Unnammed 2	0.1	High	0	1
AU	Coorong	West Cattle	0.1	High	0	1
AU	Coorong	Wild Dog	0.2	High	0	2
AU	Coral Sea Islands (Diamond Islets)	East Diamond Islet	1.7	High	0	3
AU	Corner Inlet	Clonmel	6.0	High	0	4
AU	Furneaux Group	Flinders	1345.4	High	1 - 1000	4
AU	Gippsland Lakes	Crescent	0.1	High	0	2
AU	Gippsland Lakes	Flanagan	1.1	High	0	4
AU	Gippsland Lakes	Rigby	1.4	High	0	2
AU	Gulf of St Vincent	Troubridge	0.1	High	Unknown	2
AU	Heard and McDonald Islands	Heard	387.9	High	0	3
AU	Heard and McDonald Islands	McDonald	1.5	High	0	3
AU	Heard and McDonald Islands	Meyer Rock	0.7	High	0	3
AU	Heard and McDonald Islands	Shag Island	0.5	High	0	4

AU	Investigator Strait	Kangaroo	4416.6	High	>1000	4
AU	Lord Howe Islands	Lord Howe	18.3	High	1 - 1000	2
AU	Macquarie Islands	Bishop and Clerk	0.2	High	0	4
AU	Macquarie Islands	Macquarie	128.7	High	1 - 1000	1
AU	Montebello Islands	Fairy Tern	<0.1	High	0	2
AU	Montebello Islands	Hibbertia	<0.1	High	0	2
AU	Montebello Islands	Mushroom	0.1	High	0	3
AU	Myall Coast Islands	Broughton	1.6	High	0	2
AU	Myall Coast Islands	Little Broughton	0.4	High	0	1
AU	New South Wales	Montague	1.1	High	0	1
AU	Nuyts Archipelago	Eyre	11.7	High	0	2
AU	Nuyts Archipelago	Little Eyre	0.7	High	0	2
AU	Nuyts Archipelago	Saint Peter	39.3	High	0	2
AU	Port Phillip Bay	French	172.1	High	1 - 1000	4
AU	Port Phillip Bay	Mud	0.6	High	0	3
AU	Port Phillip Bay	Ram	<0.1	High	0	2
AU	Port Phillip Bay	South Channel	<0.1	High	0	2
AU	Port Phillip Bay	Swan	3.4	High	>1000	4
AU	Port Stevens Region	Boondelbah	0.2	High	0	1
AU	Port Stevens Region	Cabbage Tree	0.4	High	0	1
AU	Recherche Archipelago	Six Mile	0.2	High	0	4
AU	Spencer Gulf	English	<0.1	High	0	2
AU	Tasmanian Islands	Beagle	0.1	High	0	2
AU	Tasmanian Islands	King	1108.5	High	>1000	4
AU	Tasmanian Islands	Tasmania	64278	High	>1000	4

AU	Tyers Lake	Plate	<0.1	High	0	4
AU	Tyers Lake	Raven	<0.1	High	0	4
AU	Tyers Lake	Tern	<0.1	High	0	4
AU	Venus Bay	Island B	0.2	High	0	2
AU	Western Australia	Boullanger	0.5	High	0	2
AU	Western Australia	Garden	12.7	High	>1000	4
AU	Western Australia	Lancelin	0.1	High	0	1
AU	Western Australia	Sandy	0.2	High	0	2
AU	Western Australia	Webb	<0.1	High	0	2
AU	Western Australia	Whitlock	0.1	High	0	4
AU	Western Australia (Dampier Archipelago)	Cohen	0.2	High	0	2
AU	Western Australia (Dampier Archipelago)	Egret	0.1	High	0	2
AU	Western Australia (Exmouth Gulf)	Roberts	0.9	High	0	2
BG	Bulgarian Black Sea Coast	St. Ivan	0.3	Upper Middle	0	2
BG	Bulgarian Black Sea Coast	St. Toma (Snake)	<0.1	Upper Middle	0	2
BH	Hawar Islands	Rubudh East	1.7	High	0	4
BH	Hawar Islands	Rubudh West	1.1	High	0	4
BH	Hawar Islands	Suwad al Janubiyah	7.3	High	0	2
BR	Trinidad and Martin Vas	Trindade	10.9	Upper Middle	1 - 1000	4
CA	Haida Gwaii	Graham	6361	High	>1000	4
CA	Vancouver Islands	Vancouver	31947	High	>1000	4
CL	Antofagasta Region	Santa Maria	1.6	Upper Middle	1 - 1000	4
CL	Arauco Province	Mocha	52.3	Upper Middle	1 - 1000	2

CL	Atacama Region	Chanaral	5.4	Upper Middle	0	2
CL	Atacama Region	Grande De Atacama	0.9	Upper Middle	0	1
CL	Atacama Region	Pan de Azucar	<0.1	Upper Middle	0	4
CL	Austral Islands (Easter Group)	Easter (Rapa Nui)	169.7	Upper Middle	>1000	4
CL	Austral Islands (Easter Group)	Motu Nui	0.1	Upper Middle	0	2
CL	Austral Islands (Easter Group)	Sala y Gomez	1.5	Upper Middle	0	1
CL	Chiloe Islands	Metalqui	0.8	Upper Middle	0	2
CL	Coquimbo Region	Choros	4.1	Upper Middle	0	2
CL	Coquimbo Region	Damas	1.0	Upper Middle	0	2
CL	Coquimbo Region	Pajaro Nino	<0.1	Upper Middle	0	4
CL	Coquimbo Region	Pajaros Dos	0.3	Upper Middle	0	3
CL	Coquimbo Region	Pajaros Uno	1.1	Upper Middle	0	4
CL	Desventuradas Islands	San Ambrosio	5.3	Upper Middle	1 - 1000	4
CL	Desventuradas Islands	San Felix	3.0	Upper Middle	1 - 1000	4
CL	Diego de Almagro	Diego de Almagra	379.1	Upper Middle	0	2
CL	Diego Ramirez Islands	Bartolome	1.3	Upper Middle	0	3
CL	Diego Ramirez Islands	Este	0.1	Upper Middle	0	3
CL	Diego Ramirez Islands	Ester	0.2	Upper Middle	0	3
CL	Diego Ramirez Islands	Gonzalo	0.8	Upper Middle	1 - 1000	3
CL	Diego Ramirez Islands	Martinez	0.1	Upper Middle	0	3
CL	Diego Ramirez Islands	Mendoza	0.1	Upper Middle	0	3
CL	Diego Ramirez Islands	Norte	0.2	Upper Middle	0	3
CL	Diego Ramirez Islands	Santander	0.1	Upper Middle	0	3
CL	Diego Ramirez Islands	Schlatter	0.1	Upper Middle	0	3
CL	Islas Barnevelt	Barnevelt	1.5	Upper Middle	0	4

CL	Islas Ildefonso	Cincloudes	<0.1	Upper Middle	0	3
CL	Islas Ildefonso	Grande	1.0	Upper Middle	0	3
CL	Islas Ildefonso	Norte	0.1	Upper Middle	0	3
CL	Islas Ildefonso	Spirit	0.1	Upper Middle	0	3
CL	Islas Ildefonso	Square	<0.1	Upper Middle	0	3
CL	Islas Ildefonso	Sur	0.2	Upper Middle	0	1
CL	Islotes Evangelistas	Islote Elcano	0.6	Upper Middle	0	3
CL	Islotes Evangelistas	Islote Lobos	0.3	Upper Middle	0	3
CL	Juan Fernandez Islands	Alejandro Selkirk	55.1	Upper Middle	1 - 1000	4
CL	Juan Fernandez Islands	Morro El Verdugo	<0.1	Upper Middle	0	3
CL	Juan Fernandez Islands	Morro Juanango	<0.1	Upper Middle	0	1
CL	Juan Fernandez Islands	Robinson Crusoe	52.1	Upper Middle	1 - 1000	2
CL	Juan Fernandez Islands	Santa Clara	2.6	Upper Middle	0	1
CL	Magellan Region	Buenaventura	0.2	Upper Middle	0	4
CL	Magellan Region	Desolation	1346.9	Upper Middle	Unknown	2
CL	Magellan Region	Islote Albatros	0.2	Upper Middle	0	3
CL	Magellan Region	Islote Leonard	0.2	Upper Middle	0	3
CL	Magellan Region	Noir	19.6	Upper Middle	0	2
CL	Magellan Region	Recalada	81.6	Upper Middle	0	2
CL	Magellan Region	Solitario	0.1	Upper Middle	0	4
CL	Magellan Region	Terhalten	0.3	Upper Middle	0	4
CL	Magellan Region (Bahia Dineley)	Esmeralda	539.7	Upper Middle	0	2
CL	Magellan Region (Golfo Ladrillero)	Golfo Ladrillero	0.1	Upper Middle	Unknown	4
CL	Magellan Region (Groupo Cabo de Hornos)	Herschel	3.3	Upper Middle	0	2

CL	Magellan Region (Groupo Cabo de Hornos)	Hornos	22.4	Upper Middle	1 - 1000	2
CL	Magellan Region (Reina Adelaida Islands)	Reina Adelaida	1.0	Upper Middle	Unknown	4
CL	Punihuil Islands	Punihuil 1	0.1	Upper Middle	0	3
CL	Punihuil Islands	Punihuil 2	0.1	Upper Middle	0	3
CL	Valparaiso Region	Cachagua	<0.1	Upper Middle	0	4
CL	Valparaiso Region	Concon	0.1	Upper Middle	0	3
CN	Jiushan Islands	Jiangjunmao	0.2	Upper Middle	0	4
CN	Tstingtao	Muguan Dao	0.5	Upper Middle	Unknown	4
CN	Wuzhishan Islands	Mantou shan	0.1	Upper Middle	0	4
CN	Wuzhishan Islands	Yaque shan	<0.1	Upper Middle	0	4
DO	Greater Antilles (Hispaniola)	Hispaniola	74546	Upper Middle	>1000	4
DO	Lesser Antilles	Dominica	764.4	Upper Middle	>1000	4
EC	Galapagos Islands	Baltra	27.7	Upper Middle	1 - 1000	4
EC	Galapagos Islands	Bartolome	1.6	Upper Middle	0	2
EC	Galapagos Islands	Espanola (Hood)	64.1	Upper Middle	0	1
EC	Galapagos Islands	Fernandina	656.7	Upper Middle	0	1
EC	Galapagos Islands	Floreana	178.5	Upper Middle	1 - 1000	2
EC	Galapagos Islands	Genovesa	16.6	Upper Middle	0	1
EC	Galapagos Islands	Isabela	4738.6	Upper Middle	>1000	2
EC	Galapagos Islands	Jensen (Caamano)	0.1	Upper Middle	0	1
EC	Galapagos Islands	Lobos	0.2	Upper Middle	0	1
EC	Galapagos Islands	Logie (Lougie)	0.1	Upper Middle	0	2
EC	Galapagos Islands	Marchena	131.5	Upper Middle	0	2
EC	Galapagos Islands	Marielas Norte	<0.1	Upper Middle	0	3

EC	Galapagos Islands	Marielas Sur	<0.1	Upper Middle	0	1
EC	Galapagos Islands	Mosquera	0.2	Upper Middle	0	1
EC	Galapagos Islands	Pinta	62.4	Upper Middle	0	1
EC	Galapagos Islands	Plaza Sur	0.2	Upper Middle	0	1
EC	Galapagos Islands	San Cristobal	568.1	Upper Middle	>1000	2
EC	Galapagos Islands	Santa Cruz	999.9	Upper Middle	>1000	2
EC	Galapagos Islands	Santa Fe	25.9	Upper Middle	0	1
EC	Galapagos Islands	Santiago (San Salvador)	580.4	Upper Middle	0	2
EC	Galapagos Islands	Seymour Norte	2.1	Upper Middle	0	1
EC	Manabi Region	Plata	6.7	Upper Middle	1 - 1000	4
ES	Balearic Islands (Cabrera Group)	Cabrera Gran	13.2	High	1 - 1000	2
ES	Balearic Islands (Cabrera Group)	Fonoll	<0.1	High	0	4
ES	Balearic Islands (Cabrera Group)	Imperial	0.1	High	0	4
ES	Balearic Islands (Cabrera Group)	Na Plana	0.2	High	0	4
ES	Balearic Islands (Cabrera Group)	Na Pobra	0.1	High	0	3
ES	Balearic Islands (Cabrera Group)	Rates	<0.1	High	0	2
ES	Balearic Islands (Cabrera Group)	Redona	0.2	High	0	3
ES	Balearic Islands (Cabrera Group)	Sa Conillera	1.7	High	0	2
ES	Balearic Islands (Fomentera Group)	Espalmador	1.7	High	0	4
ES	Balearic Islands (Fomentera Group)	Espardell	0.7	High	0	1
ES	Balearic Islands (Fomentera Group)	Espartar	0.3	High	0	4
ES	Balearic Islands (Fomentera Group)	Formentera	84.0	High	>1000	4



ES	Balearic Islands (Ibiza Group)	Bosc	0.3	High	0	4
ES	Balearic Islands (Ibiza Group)	Conillera	1.3	High	0	4
ES	Balearic Islands (Ibiza Group)	Tagomago	0.8	High	Unknown	4
ES	Balearic Islands (Ibiza Group)	Vedra	0.9	High	0	4
ES	Balearic Islands (Ibiza Group)	Vedranell	0.3	High	0	2
ES	Balearic Islands (Mallorca Group)	Dragonera	3.4	High	0	1
ES	Balearic Islands (Mallorca Group)	Majorca (Mallorca)	3644.7	High	>1000	4
ES	Balearic Islands (Mallorca Group)	Malgrat gran	0.2	High	0	3
ES	Balearic Islands (Mallorca Group)	Malgrat petit	<0.1	High	0	3
ES	Balearic Islands (Menorca Group)	Aire	0.5	High	0	4
ES	Balearic Islands (Menorca Group)	Menorca	705.9	High	>1000	4
FJ	Fiji (Kadavu Group)	Kadavu	454.0	Lower Middle	>1000	4
FJ	Fiji (Lomaiviti Group)	Gau	142.8	Lower Middle	>1000	4
FJ	Fiji (Lomaiviti Group)	Koro	107.5	Lower Middle	>1000	4
FJ	Fiji (Lomaiviti Group)	Ovalau	109.2	Lower Middle	>1000	4
FJ	Fiji (Vanua Levu Group)	Vanua Levu	5794.3	Lower Middle	>1000	4
FJ	Fiji (Viti Levu Group)	Viti Levu	10758	Lower Middle	>1000	4
FJ	Fiji (Yasayasamoala Group)	Matuku	32.2	Lower Middle	1 - 1000	4
FJ	Fiji (Yasayasamoala Group)	Moala	63.8	Lower Middle	>1000	4
FJ	Fiji (Yasayasamoala Group)	Totoya	34.1	Lower Middle	1 - 1000	4
FR	Amsterdam and St. Paul Islands	Amsterdam	62.6	High	1 - 1000	4
FR	Amsterdam and St. Paul Islands	Saint-Paul	10.3	High	1 - 1000	4
FR	Austral Islands (Rapa Group)	Rarapai	<0.1	High	0	4
FR	Austral Islands (Rapa Group)	Tarakoi	0.1	High	0	4

FR	Coral Sea Islands (Chesterfield Islands)	Mouillage	0.8	High	0	3
FR	Coral Sea Islands (Chesterfield Islands)	Passage	2.0	High	0	3
FR	Corsican Islands	Gargalo	0.3	High	0	2
FR	Corsican Islands	Giraglia	0.1	High	0	2
FR	Corsican Islands (Cerbicale Islands)	Forana	0.2	High	0	2
FR	Crozet Islands	Apotres	2.9	High	0	3
FR	Crozet Islands	Cochons	69.5	High	0	4
FR	Crozet Islands	l'Est	130.8	High	0	4
FR	Crozet Islands	Penguin (Pingouins)	0.3	High	0	4
FR	Crozet Islands	Possession	152.4	High	1 - 1000	4
FR	French Polynesia (Tubuai Islands)	Raivavae	15.7	High	1 - 1000	4
FR	Frioul archipelago	Ratonneau/Pomègues	2.7	High	1 - 1000	4
FR	Gambier Islands	Manui	0.1	High	0	4
FR	Gambier Islands	Motu Teiku	<0.1	High	0	3
FR	Hyeres Islands	Bagaud	0.8	High	0	2
FR	Hyeres Islands	Le Levant	11.3	High	1 - 1000	4
FR	Hyeres Islands	Porquerolles	15.1	High	1 - 1000	4
FR	Hyeres Islands	Port Crox	7.0	High	1 - 1000	2
FR	Kerguelen Islands	Briand	1.2	High	0	4
FR	Kerguelen Islands	Clugny	1.0	High	0	3
FR	Kerguelen Islands	Foch	213.2	High	0	3
FR	Kerguelen Islands	Howe	34.6	High	0	4

FR	Kerguelen Islands	Kerguelen (Grand Terre)	6768.5	High	1 - 1000	4
FR	Kerguelen Islands	Mac Murdo	5.8	High	0	3
FR	Kerguelen Islands	Sibbald	1.7	High	0	4
FR	Kerguelen Islands	St. Lanne Gramont	48.0	High	0	3
FR	Kerguelen Islands (Golfe du Morbihan)	Blakeney	2.9	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Briggs	0.8	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Bryer	1.3	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Chat	2.3	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Cimetiere	3.5	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Cochons	2.0	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Inskip	2.9	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Long	1.0	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Longue	36.5	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Mayes	3.3	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Penn	2.1	High	0	4
FR	Kerguelen Islands (Golfe du Morbihan)	Suhm	0.7	High	0	4
FR	Kerguelen Islands (Leygues Islands)	Leygues North	4.9	High	0	3

FR	Kerguelen Islands (Nuageuses)	Croy	11.3	High	0	3
FR	Kerguelen Islands (Nuageuses)	Rolland	10.2	High	0	3
FR	Kerguelen Islands (Nuageuses)	Ternay (East)	0.7	High	0	3
FR	Kerguelen Islands (Nuageuses)	Ternay (West)	0.4	High	0	3
FR	Lesser Antilles (Guadeloupe Islands)	Guadeloupe	1468.9	High	>1000	4
FR	Lesser Antilles (Martinique Islands)	Martinique	1140.6	High	>1000	4
FR	Marquesas	Fatu Huku	1.0	High	0	3
FR	Marquesas	Hatutaa	8.0	High	0	2
FR	Marquesas	Moho Tani	14.7	High	0	2
FR	Marquesas	Motu Tui	<0.1	High	0	4
FR	Marquesas	Nuku Hiva	362.3	High	>1000	4
FR	Marquesas	Tahuata	75.1	High	1 - 1000	4
FR	Marquesas (Nuku Hiva)	Hatu Iti (Motu Iti)	<0.1	High	0	4
FR	Marquesas (Ua Pou group)	Motu Mokohe	0.1	High	0	4
FR	Marquesas (Ua Pou group)	Motu Oa	0.5	High	0	4
FR	Marseille Islands (Riou Archipelago)	Grand Congloue	<0.1	High	0	2
FR	Marseille Islands (Riou Archipelago)	Jarre	0.5	High	0	2
FR	Marseille Islands (Riou Archipelago)	Maire	0.3	High	0	2
FR	Marseille Islands (Riou Archipelago)	Riou	1.0	High	0	2
FR	Mascarene Islands	Reunion	2530.6	High	>1000	4
FR	New Caledonia Islands	New Caledonia (Grand Terre)	16469.5	High	>1000	4

FR	New Caledonia Islands (South Lagoon)	Amedee	<0.1	High	0	3
FR	New Caledonia Islands (South Lagoon)	Atire	0.2	High	0	4
FR	New Caledonia Islands (South Lagoon)	Kae	0.2	High	0	1
FR	New Caledonia Islands (South Lagoon)	Mbe	0.1	High	0	3
FR	New Caledonia Islands (South Lagoon)	Redika	0.2	High	0	3
FR	New Caledonia Islands (South Lagoon)	Ua	0.1	High	0	3
FR	New Caledonia Islands (South Lagoon)	Uatio	0.1	High	0	3
FR	Society Islands	Tahaa	90.9	High	>1000	4
FR	Society Islands	Tahiti	1045.8	High	>1000	4
GB	Ascension Islands	Boatswainbird Islet	0.1	High	0	4
GB	Bermuda	Great Bermuda	56.0	High	>1000	4
GB	Bermuda (Castle Islands)	Castle	0.1	High	0	2
GB	Bermuda (Castle Islands)	Coopers (St. David)	7.4	High	0	4
GB	Bermuda (Castle Islands)	Green Rock	<0.1	High	0	2
GB	Bermuda (Castle Islands)	Horn Rock	<0.1	High	0	4
GB	Bermuda (Castle Islands)	Nonsuch	0.2	High	1 - 1000	2
GB	Bermuda (Long Bay)	Inner Pear Rock	<0.1	High	0	4
GB	Bermuda (Long Bay)	Outer Pear Rock	<0.1	High	0	4
GB	Bermuda (Ruth's Bay)	Long Rock	<0.1	High	0	4
GB	Falkland Islands	Arch	2.9	High	0	2
GB	Falkland Islands	Beauchene	3.0	High	0	1

GB	Falkland Islands	Bird	1.6	High	0	3
GB	Falkland Islands	Bleaker	24.9	High	1 - 1000	4
GB	Falkland Islands	Bottom	0.2	High	0	4
GB	Falkland Islands	Clump	0.3	High	0	2
GB	Falkland Islands	Cochon	0.3	High	0	3
GB	Falkland Islands	East Falkland	6613.8	High	>1000	4
GB	Falkland Islands	Elephant Jason	3.5	High	0	1
GB	Falkland Islands	First Passage	9.2	High	0	3
GB	Falkland Islands	Grand Jason	15.7	High	0	3
GB	Falkland Islands	Hummock	3.8	High	0	3
GB	Falkland Islands	Keppel	41.6	High	0	4
GB	Falkland Islands	Kidney	0.6	High	0	3
GB	Falkland Islands	New	23.4	High	1 - 1000	4
GB	Falkland Islands	North	1.0	High	0	4
GB	Falkland Islands	Pebble	116.5	High	1 - 1000	4
GB	Falkland Islands	Rabbit	2.3	High	0	4
GB	Falkland Islands	Saunders	130.5	High	1 - 1000	4
GB	Falkland Islands	Sea Lion	10.2	High	>1000	4
GB	Falkland Islands	Second Passage	8.2	High	0	3
GB	Falkland Islands	South Jason	4.9	High	0	1
GB	Falkland Islands	Steeple Jason	10.2	High	0	4
GB	Falkland Islands	West Falklands	4529.4	High	1 - 1000	4
GB	Falkland Islands	West Point	13.7	High	1 - 1000	4
GB	Falkland Islands	White Rock	<0.1	High	0	4
GB	Pitcairn Islands	Ducie	5.8	High	0	4

GB	Pitcairn Islands	Henderson	37.8	High	0	4
GB	Pitcairn Islands	Oeno	0.1	High	1 - 1000	3
GB	South Georgia Islands	Bird	5.9	High	1 - 1000	1
GB	South Georgia Islands	Cooper	5.2	High	0	1
GB	South Georgia Islands	Saddle	0.9	High	0	3
GB	South Georgia Islands	South Georgia	3603.3	High	1 - 1000	4
GB	South Georgia Islands (Annenkov Islands)	Annenkov	16.6	High	0	1
GB	South Georgia Islands (Anvil Stacks)	Anvil Stacks island 1	0.2	High	0	3
GB	South Georgia Islands (Bay of Isles)	Albatross	1.5	High	1 - 1000	1
GB	South Georgia Islands (Bay of Isles)	Crescent	0.1	High	0	1
GB	South Georgia Islands (Bay of Isles)	Inner Lee	0.4	High	0	1
GB	South Georgia Islands (Bay of Isles)	Invisible	0.3	High	0	1
GB	South Georgia Islands (Bay of Isles)	Mollymawk	0.2	High	0	1
GB	South Georgia Islands (Bay of Isles)	Outer Lee	0.3	High	0	1
GB	South Georgia Islands (Bay of Isles)	Petrel	0.2	High	0	1
GB	South Georgia Islands (Bay of Isles)	Prion	0.8	High	1 - 1000	1
GB	South Georgia Islands (Bay of Isles)	Skua	0.3	High	0	1
GB	South Georgia Islands (Bay of Isles)	Tern	0.2	High	0	1

GB	South Georgia Islands (Bjornstadt Bay)	Bjornstadt Bay island 2	<0.1	High	0	4
GB	South Georgia Islands (Cape Disappointment)	Brode	0.1	High	0	4
GB	South Georgia Islands (Cape Disappointment)	First Rock	0.1	High	0	3
GB	South Georgia Islands (Cape Disappointment)	Green	0.3	High	0	3
GB	South Georgia Islands (Cape Vakop)	Cape Vakop island 1	0.1	High	0	4
GB	South Georgia Islands (Clerke Rocks)	Clerke Rocks main island	0.2	High	0	3
GB	South Georgia Islands (Clerke Rocks)	Clerke Rocks second island	0.1	High	0	3
GB	South Georgia Islands (Clerke Rocks)	Clerke Rocks third island	<0.1	High	0	3
GB	South Georgia Islands (Clerke Rocks)	Nobby	0.6	High	0	3
GB	South Georgia Islands (Clerke Rocks)	The Office Boys east island	0.1	High	0	3
GB	South Georgia Islands (Clerke Rocks)	The Office Boys north island	0.7	High	0	3
GB	South Georgia Islands (Clerke Rocks)	The Office Boys south island	<0.1	High	0	3
GB	South Georgia Islands (Hauge Reef)	Hauge Reef island 1	0.1	High	0	3
GB	South Georgia Islands (Hauge Reef)	Pillow Rock	0.2	High	0	3
GB	South Georgia Islands (Henningsen Glacier)	Henningsen Glacier island 3	<0.1	High	0	3
GB	South Georgia Islands (Jomfruene Islands)	Jomfruene island 1	<0.1	High	0	3



GB	South Georgia Islands (Jomfruene Islands)	Jomfruene island 2	<0.1	High	0	3
GB	South Georgia Islands (Jomfruene Islands)	Jomfruene island 3	0.1	High	0	3
GB	South Georgia Islands (King Haakon Bay)	McCarthy	0.7	High	0	3
GB	South Georgia Islands (Kupriyanov Islands)	Kupriyanov island 2	0.1	High	0	3
GB	South Georgia Islands (Kupriyanov Islands)	Kupriyanov island 3	0.1	High	0	3
GB	South Georgia Islands (Kupriyanov Islands)	Poncet	0.2	High	0	3
GB	South Georgia Islands (Low Rock Point)	Low Rock Point island 1	<0.1	High	0	3
GB	South Georgia Islands (Nunez Peninsula)	Nunez Peninsula island 7	<0.1	High	0	3
GB	South Georgia Islands (Paryadin Peninsula)	Paryadin Peninsula north island 2	<0.1	High	0	3
GB	South Georgia Islands (Paryadin Peninsula)	Paryadin Peninsula north island 3	<0.1	High	0	3
GB	South Georgia Islands (Paryadin Peninsula)	Paryadin Peninsula south island 2	0.1	High	0	4
GB	South Georgia Islands (Paryadin Peninsula)	Paryadin Peninsula south island 3	<0.1	High	0	3
GB	South Georgia Islands (Pickersgill Islands)	Pickersgill Island 1	0.4	High	0	3
GB	South Georgia Islands (Pickersgill Islands)	Pickersgill island 2	0.2	High	0	3
GB	South Georgia Islands (Pickersgill Islands)	Tanner	0.5	High	0	3
GB	South Georgia Islands (Right Whale Rocks)	Right Whale Rocks island 1	0.1	High	0	3

GB	South Georgia Islands (Royal Bay)	Harcourt	0.7	High	0	4
GB	South Georgia Islands (Samuel Islands)	Austin	0.1	High	0	3
GB	South Georgia Islands (Samuel Islands)	Tidespring	0.1	High	0	3
GB	South Georgia Islands (Skrap Skerries)	East Skerry	0.2	High	0	3
GB	South Georgia Islands (Smaaland Cove)	Smaaland Cove Island	<0.1	High	0	3
GB	South Georgia Islands (Sorn and Bernt)	Bernt	0.1	High	0	3
GB	South Georgia Islands (The Guides)	The Guides island 1	<0.1	High	0	3
GB	South Georgia Islands (Trollhul)	Trollhul island 1	<0.1	High	0	3
GB	South Georgia Islands (Trollhul)	Trollhul north island 1	0.2	High	0	3
GB	South Georgia Islands (Welcome Islands)	Dorada	0.1	High	0	3
GB	South Georgia Islands (Welcome Islands)	Pharos	0.1	High	0	3
GB	South Georgia Islands (Welcome Islands)	Sigma	0.1	High	0	3
GB	South Georgia Islands (Willis Islands)	Hall	0.1	High	0	3
GB	South Georgia Islands (Willis Islands)	Main	5.2	High	0	3
GB	South Georgia Islands (Willis Islands)	Proud	0.1	High	0	3
GB	South Georgia Islands (Willis Islands)	Trinity	0.9	High	0	3

GB	South Georgia Islands (Willis Islands)	Verdant Island island 2	0.1	High	0	3
GB	South Georgia Islands (Willis Islands)	Verdant Island island 3	<0.1	High	0	3
GB	South Sandwich Islands	Bellingshausen	1.5	High	0	3
GB	South Sandwich Islands	Candelmas	13.3	High	0	3
GB	South Sandwich Islands	Montagu	110.7	High	0	3
GB	South Sandwich Islands	Saunders	39.5	High	0	3
GB	South Sandwich Islands	Thule	19.4	High	0	3
GB	South Sandwich Islands	Vindication	4.2	High	0	3
GB	South Sandwich Islands	Visokoi	34.2	High	0	3
GB	South Sandwich Islands	Zavodovski	21.0	High	0	3
GB	St. Helena Islands	Ascension	101.2	High	1 - 1000	4
GB	Tristan da Cunha	Gough	66.9	High	1 - 1000	4
GB	Tristan da Cunha	Inaccessible	18.2	High	0	3
GB	Tristan da Cunha	Tristan da Cunha	113.7	High	1 - 1000	4
GB	Tristan da Cunha (Nightingale Islands)	Middle	0.2	High	0	3
GB	Tristan da Cunha (Nightingale Islands)	Nightingale	3.4	High	0	3
GB	Tristan da Cunha (Nightingale Islands)	Stoltenhoff	0.2	High	0	3
GR	Cyclades Islands	Astypalea (Astypalaia)	103.2	High	>1000	4
GR	Cyclades Islands	Sirna (Syrna)	8.8	High	1 - 1000	4
GR	North Aegean Islands	Antipsara	4.9	High	1 - 1000	2
GR	North Aegean Islands	Lesvos	1652.8	High	>1000	4
GR	North Aegean Islands	Psara	42.5	High	1 - 1000	4

HR	Lastovo archipelago	Kopiste	1.3	High	0	2
HR	Lastovo archipelago	Makarac	0.1	High	0	2
HR	Lastovo archipelago	Veliki Maslinjak	0.1	High	0	2
HR	Lastovo archipelago	Veliki Rutvenjak	<0.1	High	0	2
HR	Lastovo archipelago	Zaklopatica	<0.1	High	0	2
HR	Vis Archipelago	Susac	4.7	High	1 - 1000	2
HR	Vis Archipelago	Svetac	5.0	High	1 - 1000	4
IR		Sheedvar	1.1	Upper Middle	0	2
IT	Pontino Islands	Palmarola	1.9	High	1 - 1000	4
IT	Pontino Islands	Ponza	9.1	High	>1000	4
IT	Pontino Islands	Santo Stefano Ponziane	0.4	High	0	2
IT	Pontino Islands	Ventotene	1.8	High	1 - 1000	2
IT	Pontino Islands	Zannone	1.4	High	0	1
IT	Sardinian Islands	Cavoli	0.5	High	1 - 1000	4
IT	Sardinian Islands	Figarolo (Figarello)	0.3	High	0	4
IT	Sardinian Islands	Fordada	0.1	High	0	2
IT	Sardinian Islands	Molara	3.8	High	1 - 1000	4
IT	Sardinian Islands	San Pietro	53.4	High	>1000	4
IT	Sardinian Islands	Sardinia	23962. 1	High	>1000	4
IT	Sardinian Islands	Serpentara	0.5	High	0	4
IT	Sardinian Islands	Tavolara	6.7	High	1 - 1000	4
IT	Sardinian Islands	Vacca	0.2	High	0	4
IT	Sardinian Islands (Maddalena Archipelago)	Santa Maria	2.3	High	1 - 1000	2

IT	Sardinian Islands (Maddalena Archipelago)	Spargi	4.7	High	0	2
IT	Sicilian Channel Islands	Pantelleria	86.0	High	>1000	4
IT	Sicilian Islands	Favignana	22.7	High	>1000	4
IT	Sicilian Islands	Levanzo	7.0	High	1 - 1000	4
IT	Sicilian Islands	Marettimo	13.3	High	1 - 1000	4
IT	Sicilian Islands (Aeolian Islands)	Lipare	39.5	High	>1000	4
IT	Sicilian Islands (Aeolian Islands)	Salina	28.3	High	>1000	4
IT	Sicilian Islands (Aeolian Islands)	Vulcano	23.2	High	1 - 1000	4
IT	Sicilian Islands (Pelagie Islands)	Lampedusa	18.8	High	>1000	4
IT	Sicilian Islands (Pelagie Islands)	Linosa	5.5	High	1 - 1000	4
IT	Tremiti Islands	San Domino	2.8	High	1 - 1000	2
IT	Tremiti Islands	San Nicola	0.8	High	1 - 1000	2
IT	Tuscan Islands	Argentarola	<0.1	High	0	3
IT	Tuscan Islands	Capraia	20.9	High	1 - 1000	2
IT	Tuscan Islands	Giannurti	2.8	High	1 - 1000	2
IT	Tuscan Islands	Montecristo	11.1	High	1 - 1000	2
IT	Tuscan Islands	Pianosa	11.4	High	1 - 1000	2
JM	Greater Antilles (Jamaican Islands)	Jamaica	11025.9	Lower Middle	>1000	4
JP		Minami Torishima (Marcus )	1.8	High	Unknown	4
JP	Bonin Islands	Nishinoshima (Rosario)	0.3	High	0	4
JP	Bonin Islands (Chichijima Group)	Magojima	0.1	High	0	4
JP	Bonin Islands (Hahajima Group)	Anijima	7.9	High	0	1
JP	Bonin Islands (Hahajima Group)	Futagojima	<0.1	High	0	4

JP	Bonin Islands (Hahajima Group)	Imotojima Torishima	<0.1	High	0	2
JP	Bonin Islands (Hahajima Group)	Minamitori	<0.1	High	0	2
JP	Bonin Islands (Mukojima Group)	Harino-iwa	0.2	High	0	3
JP	Bonin Islands (Mukojima Group)	Kitanoshima	0.1	High	0	4
JP	Bonin Islands (Mukojima Group)	Megane-iwa	0.3	High	0	4
JP	Bonin Islands (Mukojima Group)	Mukojima	2.5	High	0	2
JP	Bonin Islands (Mukojima Group)	Nakanoshima	0.1	High	0	4
JP	Bonin Islands (Mukojima Group)	Nakodojima	1.3	High	0	2
JP	Bonin Islands (Mukojima Group)	Torishima	0.1	High	0	2
JP	Bonin Islands (Mukojima Group)	Torishima	0.1	High	0	2
JP	Bonin Islands (Yomejima Group)	Yomejima	0.8	High	0	2
JP	Daito Islands	Kitadaito	12.3	High	1 - 1000	4
JP	Daito Islands	Minamidaito	31.1	High	>1000	4
JP	Daito Islands	Okinodaito	1.3	High	0	4
JP	Danjo Islands	Hanagurijima	0.3	High	0	2
JP	Izu Islands	Hanshima	0.1	High	0	2
JP	Izu Islands	Kojine	<0.1	High	0	1
JP	Izu Islands	Kozushima	19.0	High	>1000	2
JP	Izu Islands	Miyakejima	57.2	High	>1000	2
JP	Izu Islands	Motone	<0.1	High	0	4
JP	Izu Islands	Niijima	24.7	High	>1000	2
JP	Izu Islands	Onbasejima	0.1	High	0	2
JP	Izu Islands	Onohara	0.1	High	0	2
JP	Izu Islands	Sanbondake (South)	0.1	High	0	2
JP	Izu Islands	Shikinejima	4.1	High	1 - 1000	2

JP	Izu Islands	Tadanaejima (Hebijima)	0.1	High	0	2
JP	Izu Islands	Torishima	5.2	High	0	2
JP	Izu Islands	Udone-jima	0.6	High	0	2
JP	Kiinaga Islands	Mimianajima	0.1	High	0	4
JP	Kochi Prefecture	Ko-shima	1.2	High	>1000	2
JP	Kyushu Islands	Hashirajima	3.4	High	1 - 1000	2
JP	Kyushu Islands (Birojima Islets)	Birojima	0.2	High	0	4
JP	Kyushu Islands (Genkai-nada Sea)	Eboshijima	<0.1	High	0	4
JP	Kyushu Islands (Genkai-nada Sea)	Koya-jima	0.3	High	0	3
JP	Kyushu Islands (Genkai-nada Sea)	Okino-shima	1.4	High	1 - 1000	4
JP	Nanatsu Islands	Aramik-jima	0.2	High	0	4
JP	Nanatsu Islands	Mikuriyajima 1	<0.1	High	Unknown	4
JP	Nanatsu Islands	Mikuriyajima 2	0.2	High	0	4
JP	Nanatsu Islands	Ooshima	0.3	High	Unknown	4
JP	Ryukyu Islands (Senkaku group)	Kitako-jima	0.6	High	0	4
JP	Ryukyu Islands (Senkaku group)	Kuba-jima (Kobishi)	1.4	High	0	4
JP	Ryukyu Islands (Senkaku group)	Minami-kojima	0.7	High	0	4
JP	Ryukyu Islands (Senkaku group)	Uotsuri-jima	4.5	High	0	4
JP	Shimoda Islands	Mikomotojima	0.1	High	0	1
JP	Volcano Islands	Iwo Jima (Iwo To)	26.8	High	1 - 1000	4
JP	Volcano Islands	South Iwo (Minamiiwoto)	3.4	High	0	1
JP	Wasaka Bay	Kutsujima (Ko-shima)	0.1	High	0	3

KI	Line Islands	Malden	35.1	Lower Middle	0	2
KI	Line Islands	Washington (Teraina)	12.3	Lower Middle	>1000	4
KI	Line Islands (Kiritimati)	Cook	0.6	Lower Middle	0	3
KI	Line Islands (Kiritimati)	Kiritimati (Christmas)	480.1	Lower Middle	>1000	4
KI	Line Islands (Kiritimati)	Motu Tabu	0.2	Lower Middle	0	1
KI	Phoenix Islands	Canton (Kanton)	16.3	Lower Middle	1 - 1000	2
KI	Phoenix Islands	Enderbury	7.2	Lower Middle	0	1
KI	Phoenix Islands	McKean	0.9	Lower Middle	0	1
KI	Phoenix Islands	Phoenix (Rawaki)	0.8	Lower Middle	0	1
KR	Huksan Do	Taegukhul-to (Gugul)	13.9	High	Unknown	4
KW	Persian Gulf	Qaru	0.2	High	0	4
KW	Persian Gulf	Umm al Maradim	0.3	High	0	4
MT	Malta	St. Paul's Island	<0.1	High	0	2
MT	Malta Islands	Comino	3.3	High	1 - 1000	4
MT	Malta Islands	Cominotto Islet	0.2	High	0	2
MT	Malta Islands	Filfla Islet	0.1	High	0	1
MT	Malta Islands	Fungus Rock	<0.1	High	0	2
MT	Malta Islands	Gozo	68.4	High	>1000	4
MT	Malta Islands	Malta	251.5	High	>1000	4
MU	Mascarene Islands	Rodrigues	113.1	Upper Middle	>1000	4
MU	Mascarene Islands	Round	2.0	Upper Middle	1 - 1000	1
MX	Gulf of California	Coronados	1<0.1	Upper Middle	0	1
MX	Gulf of California	Espiritu Santo	87.3	Upper Middle	1 - 1000	2
MX	Gulf of California	San Francisco	4.6	Upper Middle	0	1
MX	Gulf of California	San Ildefonso	1.0	Upper Middle	0	1



MX	Gulf of California	San Luis	7.0	Upper Middle	0	1
MX	Gulf of California (Midriff Islands)	Alcatraz (Pelicano)	1.0	Upper Middle	1 - 1000	2
MX	Gulf of California (Midriff Islands)	Cardinosa Este	0.1	Upper Middle	0	1
MX	Gulf of California (Midriff Islands)	Cholludo (Roca la Foca)	0.1	Upper Middle	0	1
MX	Gulf of California (Midriff Islands)	Datil (Turner)	1.9	Upper Middle	0	1
MX	Gulf of California (Midriff Islands)	Las Animas	5.0	Upper Middle	1 - 1000	1
MX	Gulf of California (Midriff Islands)	Mejia	3.3	Upper Middle	0	2
MX	Gulf of California (Midriff Islands)	Partida Norte	1.5	Upper Middle	1 - 1000	1
MX	Gulf of California (Midriff Islands)	Rasa	<0.1	Upper Middle	1 - 1000	1
MX	Gulf of California (Midriff Islands)	San Esteban	44.3	Upper Middle	1 - 1000	2
MX	Gulf of California (Midriff Islands)	San Pedro Martir	2.7	Upper Middle	1 - 1000	1
MX	Gulf of California (Midriff Islands)	San Pedro Martir Islet	<0.1	Upper Middle	0	1
MX	Gulf of California (Midriff Islands)	Tiburon	1220.9	Upper Middle	1 - 1000	2
MX	Pacific Coast Baja Peninsula	Cedros	378.0	Upper Middle	>1000	4
MX	Pacific Coast Baja Peninsula	Guadalupe	261.9	Upper Middle	1 - 1000	2
MX	Pacific Coast Baja Peninsula	Natividad	10.2	Upper Middle	1 - 1000	1
MX	Pacific Coast Baja Peninsula	San Jeronimo	0.7	Upper Middle	0	3
MX	Pacific Coast Baja Peninsula	San Martin	3.0	Upper Middle	0	3

MX	Pacific Coast Baja Peninsula	San Roque	0.8	Upper Middle	0	1
MX	Pacific Coast Baja Peninsula (Coronados Islands)	Coronado North	0.8	Upper Middle	0	3
MX	Pacific Coast Baja Peninsula (Coronados Islands)	Coronado South	2.2	Upper Middle	0	4
MX	Pacific Coast Baja Peninsula (Coronados Islands)	Coronados Middle	0.3	Upper Middle	0	3
MX	Pacific Coast Baja Peninsula (Coronados Islands)	Coronados Middle Rock	0.2	Upper Middle	0	3
MX	Pacific Coast Baja Peninsula (Guadalupe Islands)	Afuera (Toro)	0.7	Upper Middle	0	1
MX	Pacific Coast Baja Peninsula (Guadalupe Islands)	Gargoyle	<0.1	Upper Middle	0	1
MX	Pacific Coast Baja Peninsula (Guadalupe Islands)	Negro	0.2	Upper Middle	0	1
MX	Pacific Coast Baja Peninsula (San Benitos Islands)	San Benito East	1.9	Upper Middle	0	3
MX	Pacific Coast Baja Peninsula (San Benitos Islands)	San Benito Middle	1.0	Upper Middle	0	3
MX	Pacific Coast Baja Peninsula (San Benitos Islands)	San Benito West	5.5	Upper Middle	1 - 1000	4
MX	Pacific Coast Baja Peninsula (Todos Santos Islands)	Todos Santos North	0.6	Upper Middle	0	3
MX	Pacific Coast Baja Peninsula (Todos Santos Islands)	Todos Santos South	1.3	Upper Middle	0	3
MX	Revillagigedos Islands	Clarion	29.3	Upper Middle	1 - 1000	2
MX	Revillagigedos Islands	San Benedicto	7.5	Upper Middle	0	1
MX	Revillagigedos Islands	Socorro	172.3	Upper Middle	1 - 1000	2
NA	Bains Bay	Lady's Rocks	<0.1	Upper Middle	0	1
NA	Namibian Rocks	Dagger Rock	<0.1	Upper Middle	0	1

NA	Namibian Rocks	North Reef	0.2	Upper Middle	0	1
NA	Penguin Islands	Albatross Rock	0.1	Upper Middle	0	1
NA	Penguin Islands	Hollamsbird	0.3	Upper Middle	0	1
NA	Penguin Islands	Ichaboe	0.4	Upper Middle	1 - 1000	1
NA	Penguin Islands	Little Ichaboe Rock	<0.1	Upper Middle	0	1
NA	Penguin Islands	Mercury	0.1	Upper Middle	1 - 1000	1
NA	Penguin Islands	Neglectus Islet	<0.1	Upper Middle	0	1
NA	Penguin Islands	North Long	0.2	Upper Middle	0	1
NA	Penguin Islands	Plumpudding	<0.1	Upper Middle	0	1
NA	Penguin Islands	Pomona	0.1	Upper Middle	0	1
NA	Penguin Islands	Possession	1.9	Upper Middle	1 - 1000	1
NA	Penguin Islands	Sinclair	0.1	Upper Middle	0	1
NA	Penguin Islands (Luderitz)	Halifax	0.3	Upper Middle	0	1
NA	Penguin Islands (Luderitz)	Penguin	0.6	Upper Middle	0	1
NA	Penguin Islands (Luderitz)	Seal	0.6	Upper Middle	0	1
NO		Bouvet	50.4	High	0	1
NZ	Antipodes Islands	Antipodes	24.9	High	0	4
NZ	Antipodes Islands	Bollons	1.2	High	0	3
NZ	Auckland Islands	Adams	101.3	High	0	3
NZ	Auckland Islands	Auckland	534.0	High	0	4
NZ	Auckland Islands	Disappointment	6.8	High	0	3
NZ	Auckland Islands	Enderby	7.5	High	0	3
NZ	Auckland Islands	Ewing	1.2	High	0	3
NZ	Auckland Islands	Rose	2.7	High	0	3
NZ	Bounty Islands (Center Group)	Coronet	<0.1	High	0	3

NZ	Bounty Islands (Center Group)	Funnel	<0.1	High	0	3
NZ	Bounty Islands (Center Group)	Prion	<0.1	High	0	3
NZ	Bounty Islands (East Group)	Molly Cap	<0.1	High	0	3
NZ	Bounty Islands (East Group)	North Rock	<0.1	High	0	3
NZ	Bounty Islands (West Group)	Depot	0.1	High	0	3
NZ	Bounty Islands (West Group)	Lion	<0.1	High	0	3
NZ	Bounty Islands (West Group)	Penguin	0.1	High	0	3
NZ	Bounty Islands (West Group)	Proclamation	<0.1	High	0	3
NZ	Bounty Islands (West Group)	Ranfurly	<0.1	High	0	3
NZ	Bounty Islands (West Group)	Ruatara	0.1	High	0	3
NZ	Bounty Islands (West Group)	Spider	0.1	High	0	3
NZ	Bounty Islands (West Group)	Tunnel	<0.1	High	0	3
NZ	Breaksea Sound	Breaksea	1.9	High	0	2
NZ	Breaksea Sound	Entry	0.5	High	0	1
NZ	Breaksea Sound	Hawea	0.2	High	0	1
NZ	Breaksea Sound	Johns	0.1	High	0	4
NZ	Campbell Islands	Campbell	116.1	High	1 - 1000	3
NZ	Campbell Islands	Cossack Rock	0.1	High	0	3
NZ	Campbell Islands	Dent	0.4	High	0	3
NZ	Campbell Islands	Folly	0.1	High	0	3
NZ	Campbell Islands	Hook Key (outer)	0.1	High	0	3
NZ	Campbell Islands	Jacquemart	0.5	High	0	3
NZ	Campbell Islands	Jeanette Marie	0.3	High	0	3
NZ	Campbell Islands	Monowai	0.2	High	0	3
NZ	Campbell Islands	Unnammed	0.1	High	0	3

NZ	Chalky Inlet	Chalky	5.1	High	0	1
NZ	Chalky Inlet	Passage North (Inner)	0.1	High	0	1
NZ	Chalky Inlet	Passage South (Outer)	1.9	High	0	1
NZ	Chalky Inlet	Small Craft Harbour (Small)	0.1	High	0	3
NZ	Charles Sound	Catherine	0.1	High	0	4
NZ	Charles Sound	Eleanor	0.1	High	0	2
NZ	Charles Sound	Fanny	0.1	High	0	4
NZ	Chatham Islands	Chatham (Rekohu)	909.1	High	1 - 1000	4
NZ	Chatham Islands	Fourty-Fours (Motuhara)	0.1	High	0	3
NZ	Chatham Islands	Kokepa Rock	<0.1	High	0	3
NZ	Chatham Islands	Little Mangere	0.2	High	0	3
NZ	Chatham Islands	Mangere	1.4	High	0	3
NZ	Chatham Islands	North East Reef	0.1	High	0	3
NZ	Chatham Islands	Pitt	66.0	High	1 - 1000	4
NZ	Chatham Islands	Rabbit	<0.1	High	0	3
NZ	Chatham Islands	South East (Rangatira)	2.4	High	0	4
NZ	Chatham Islands	Star Keys (Motuhope)	0.1	High	0	3
NZ	Chatham Islands	The Castle	0.1	High	0	3
NZ	Chatham Islands	The Pyramid	0.1	High	0	3
NZ	Chatham Islands (Sisters Group)	Big Sister	0.1	High	0	3
NZ	Chatham Islands (Sisters Group)	Little Sister	<0.1	High	0	3
NZ	Chatham Islands (Sisters Group)	Middle Sister	0.1	High	0	3
NZ	Cook Islands	Mangaia	51.7	High	1 - 1000	4
NZ	Cook Islands	Rarotonga	71.1	High	>1000	4

NZ	Doubtful Sound	Rolla	<0.1	High	0	4
NZ	Doubtful Sound	Seymour	0.1	High	0	2
NZ	Doubtful Sound	Shelter East	0.2	High	0	2
NZ	Doubtful Sound	Shelter West	0.1	High	0	1
NZ	Dusky Sound	Indian	2.2	High	0	2
NZ	Dusky Sound	Pigeon	1.0	High	0	2
NZ	Foveaux Strait	Centre	1.5	High	0	4
NZ	Foveaux Strait	Dog (Papa-kaha)	0.3	High	0	4
NZ	Foveaux Strait	Kuru-Kuru	<0.1	High	0	4
NZ	Foveaux Strait	Omaui	0.1	High	0	2
NZ	Foveaux Strait	Zero Rock	<0.1	High	0	4
NZ	George Sound	George Sound 1	<0.1	High	0	4
NZ	Hauraki Gulf	Great Barrier (Aotea)	306.9	High	1 - 1000	4
NZ	Hauraki Gulf	Little Barrier	33.0	High	0	1
NZ	Hen and Chicken Islands	Coppermine	1.3	High	0	1
NZ	Hen and Chicken Islands	Hen (Taranga)	6.4	High	0	1
NZ	Hen and Chicken Islands	Lady Alice	2.7	High	0	1
NZ	Hen and Chicken Islands	Middle Chicken (Whatupuke)	2.0	High	0	1
NZ	Hen and Chicken Islands	West Chicken (Mauitaha)	0.8	High	0	2
NZ	Kermadec Islands	Macauley	2.8	High	0	3
NZ	Kermadec Islands	Raoul	31.3	High	Unknown	3
NZ	Marlborough Sound	Duffer's Reef	<0.1	High	0	1
NZ	Marlborough Sound	North Trio	0.3	High	0	3
NZ	Marlborough Sound	Pig (Blumine)	4.8	High	0	2

NZ	Marlborough Sound	Sentinel Rock	<0.1	High	0	1
NZ	Marlborough Sound	White Rocks	<0.1	High	0	1
NZ	Marlborough Sound (D'Urville)	D'Urville	176.0	High	1 - 1000	4
NZ	Marlborough Sound (D'Urville)	Hapuka Rock	0.1	High	0	4
NZ	Marlborough Sound (D'Urville)	Rahuinui	0.1	High	0	4
NZ	Marlborough Sound (D'Urville)	Stewart (Te Kuru Kuru)	<0.1	High	0	4
NZ	Mercury Islands	Double (Moturehu)	0.6	High	0	1
NZ	Mercury Islands	Korapuki	0.2	High	0	1
NZ	Mercury Islands	Red Mercury (Whakau)	2.6	High	0	1
NZ	Mercury Islands	Stanley (Kawhitu)	1.2	High	0	1
NZ	New Zealand Islands	Cuvier	2.4	High	0	3
NZ	New Zealand Islands	North Island	113885	High	>1000	4
NZ	New Zealand Islands	Solander	2.0	High	0	3
NZ	New Zealand Islands	South Island	149955	High	>1000	4
NZ	Norfolk Islands	Norfolk	39.6	High	>1000	4
NZ	Norfolk Islands	Philip	2.7	High	0	2
NZ	Open Bay Islands	Taumaka	0.1	High	0	2
NZ	Otago Region	Gull Rocks	<0.1	High	0	4
NZ	Otago Region	Kinakina	0.1	High	0	4
NZ	Otago Region	Maukiekie (Moeraki)	<0.1	High	0	4
NZ	Otago Region	Wharekakahu	0.1	High	0	2
NZ	Poor Knights Islands	Aorangaia	0.2	High	0	1
NZ	Poor Knights Islands	Aorangi	1.4	High	0	1
NZ	Poor Knights Islands	Archway	0.1	High	0	1
NZ	Poor Knights Islands	Motu Kapiti	0.1	High	0	3

NZ	Poor Knights Islands	Poor Knights 1	0.1	High	0	3
NZ	Poor Knights Islands	Tawhiti Rahi	2.1	High	0	1
NZ	Preservation Inlet	Coal	12.5	High	0	1
NZ	Preservation Inlet	Long (Weka)	1.1	High	0	2
NZ	Preservation Inlet	Steep-to	0.7	High	0	2
NZ	Ruapuke Islands	Green	0.9	High	0	4
NZ	Simmonds Islands	Motu Purihi	0.1	High	0	3
NZ	Snares Islands	Broughton	0.1	High	0	3
NZ	Snares Islands	North-East	3.0	High	0	4
NZ	Snares Islands (Western Chain)	Rima	0.1	High	0	3
NZ	Snares Islands (Western Chain)	Toru Islet	0.1	High	0	3
NZ	Stewart Islands	Anchorage	1.5	High	0	2
NZ	Stewart Islands	Bench	2.1	High	0	2
NZ	Stewart Islands	Bravo	0.3	High	1 - 1000	2
NZ	Stewart Islands	Codfish	17.0	High	0	1
NZ	Stewart Islands	Crayfish	0.1	High	Unknown	2
NZ	Stewart Islands	Jacky Lee	0.3	High	0	3
NZ	Stewart Islands	Kane-to-toe	<0.1	High	0	3
NZ	Stewart Islands	Nobel	1.8	High	0	2
NZ	Stewart Islands	Passage (Whero)	<0.1	High	0	2
NZ	Stewart Islands	Putauhina	1.5	High	0	3
NZ	Stewart Islands	Stewart (Rakiura)	1702.3	High	1 - 1000	4
NZ	Stewart Islands	Tommy	0.1	High	0	1
NZ	Stewart Islands	Weka	0.1	High	Unknown	3
NZ	Whangaroa Bay	Stephenson (Ririwha)	1.5	High	1 - 1000	4



OM	Kuria Muria Islands	Hasikiya	2.5	High	0	4
PE		Asia	0.9	Upper Middle	1 - 1000	4
PE	Ballestas Islands	Ballestas East	0.3	Upper Middle	0	2
PE	Ballestas Islands	Ballestas Norte	0.2	Upper Middle	0	2
PE	Ballestas Islands	Ballestas West	<0.1	Upper Middle	0	2
PE	Chincha Islands	Chincha Centro	0.7	Upper Middle	Unknown	2
PE	Chincha Islands	Chincha Norte	0.7	Upper Middle	Unknown	2
PE	Chincha Islands	Chincha Sur	0.3	Upper Middle	Unknown	2
PE	La Libertad Region	Corcovado (Libertad)	0.1	Upper Middle	0	2
PE	La Libertad Region	Guanape Norte	0.4	Upper Middle	0	2
PE	La Libertad Region	Guanape Sur	0.3	Upper Middle	1 - 1000	2
PE	La Libertad Region	Macabi	0.6	Upper Middle	0	2
PE	Lobos de Afuera Islands	Independencia	0.8	Upper Middle	Unknown	2
PE	Lobos de Tierra	Lobos de Tierra	17.3	Upper Middle	0	2
PE	Mazorca Islands	Mazorca	0.3	Upper Middle	1 - 1000	3
PE	Pachacamac Islands	Pachacamac North	0.4	Upper Middle	Unknown	4
PE	Pachacamac Islands	Pachacamac South	0.1	Upper Middle	0	4
PE	Paracas Peninsula	La Vieja (Independencia)	11.3	Upper Middle	1 - 1000	2
PE	Paracas Peninsula	San Gallan	10.4	Upper Middle	1 - 1000	1
PE	Paracas Peninsula	Santa Rosa	0.4	Upper Middle	Unknown	1
PE	Piura Region	Foca	0.7	Upper Middle	0	4
PE	South-central Peruvian Islets	Cocotea(Cordel)	<0.1	Upper Middle	Unknown	4
PE	South-central Peruvian Islets	Hornillos	0.2	Upper Middle	0	4
PE	South-central Peruvian Islets	San Juanito	<0.1	Upper Middle	0	4

PG	Bismark Sea	Watom	14.1	Lower Middle	1 - 1000	4
PG	Papua New Guinea (Bismarck Islands)	New-Ireland	7102.1	Lower Middle	>1000	4
PG	Papua New Guinea (Bougainville Islands)	Bougainville	8762.1	Lower Middle	>1000	4
PT	Azores Islands (Central Group)	Graciosa	63.3	High	>1000	4
PT	Azores Islands (Graciosa Group)	Baixo	0.2	High	0	1
PT	Azores Islands (Graciosa Group)	Praia (Praya)	0.2	High	0	1
PT	Azores Islands (Western Group)	Corvo	17.6	High	1 - 1000	2
PT	Azores Islands (Western Group)	Flores	144.3	High	>1000	4
PT	Madeira Islands	Madeira	748.4	High	>1000	4
PT	Madeira Islands	Porto Santo	44.1	High	>1000	4
QA	Persian Gulf	al-Aliyah	1.5	High	0	4
QA	Persian Gulf	al-Ashat	0.1	High	0	4
QA	Persian Gulf	Halul	2.0	High	1 - 1000	4
RU	Commander Islands	Arij Kamen	0.1	Upper Middle	0	1
RU	Commander Islands	Bering	1223.0	Upper Middle	1 - 1000	2
RU	Commander Islands	Mednyi	265.9	Upper Middle	0	1
RU	Commander Islands	Toporkov	0.2	Upper Middle	0	1
RU	Peter the Great Bay	Furugelm	3.1	Upper Middle	0	1
RU	Peter the Great Bay	Karamsin	0.2	Upper Middle	0	3
SA	Persian Gulf (Coral Islands)	Arabiyah	0.1	High	Unknown	4
SA	Persian Gulf (Coral Islands)	Kurayn	0.1	High	0	4
SA	Gulf of Salwah	Judhaim	0.9	High	0	4
SA	Gulf of Salwah	Unaybir	0.1	High	0	4
SA	Gulf of Salwah	Zakhnuniyah	12.5	High	0	4

SB	Solomon Islands	Kolombangara	689.6	Lower Middle	>1000	4
TN	Zembra Archipelago	Zembretta	0.1	Upper Middle	0	4
TN	Zembra Archipelago	Zembrettina	<0.1	Upper Middle	0	3
TO	Tonga	Tonga (Tongatabu)	272.1	Lower Middle	>1000	4
TW		Agincourt	1.3	High	1 - 1000	4
TW	Matsu Archipelago	Baimiao Islet	<0.1	High	0	4
TW	Matsu Archipelago	Jongdao (Zhong Dao) 1	<0.1	High	0	4
TW	Matsu Archipelago	Jongdao (Zhong Dao) 2	<0.1	High	0	4
TW	Matsu Archipelago	Sanlienyu (Sanlianju) Islet	0.1	High	0	4
TW	Matsu Archipelago	Tiejien (Tiejian) Islet	<0.1	High	0	4
TW	Matsu Archipelago	Xeshan (Sheshan) Islet	0.1	High	0	4
TW	Pescadore Islands	Byosho	69.3	High	>1000	4
US	Aleutian Islands	Adak	732.3	High	1 - 1000	2
US	Aleutian Islands	Agattu	226.8	High	0	1
US	Aleutian Islands	Amak	13.0	High	0	2
US	Aleutian Islands	Atka	1060.8	High	1 - 1000	2
US	Aleutian Islands	Attu	902.5	High	1 - 1000	2
US	Aleutian Islands	Kagalaska	120.2	High	0	2
US	Aleutian Islands	Koniuji	1.1	High	0	2
US	Aleutian Islands	Unalaska	2795.4	High	>1000	2
US	Aleutian Islands	Unalga	2.3	High	0	2
US	Aleutian Islands (Bogoslof Group)	Bogoslof	1.1	High	0	2
US	Aleutian Islands (Bogoslof Group)	Fire	0.1	High	0	2

US	Aleutian Islands (Buldir Group)	Buldir	20.3	High	0	1
US	Aleutian Islands (Buldir Group)	Middle Rock	0.2	High	0	1
US	Aleutian Islands (Buldir Group)	Outer Rock	0.1	High	0	1
US	Channel Islands	Anacapa East	0.9	High	1 - 1000	1
US	Channel Islands	Anacapa Middle	0.5	High	0	1
US	Channel Islands	Anacapa West	4.3	High	1 - 1000	1
US	Channel Islands	Castle Rock	<0.1	High	0	1
US	Channel Islands	Diablo Rock 1	<0.1	High	0	1
US	Channel Islands	Diablo Rock 2	<0.1	High	0	1
US	Channel Islands	Gull	0.3	High	0	1
US	Channel Islands	Prince	0.5	High	0	1
US	Channel Islands	San Clemente	153.9	High	0	4
US	Channel Islands	San Miguel	42.7	High	0	2
US	Channel Islands	Santa Barbara	3.2	High	0	1
US	Channel Islands	Santa Cruz	257.5	High	1 - 1000	2
US	Channel Islands	Scorpion Rock (Islet)	<0.1	High	0	1
US	Channel Islands	Scorpion Rock (Main)	<0.1	High	0	1
US	Channel Islands	Shag Rock	<0.1	High	0	1
US	Channel Islands	Ship Rock	<0.1	High	0	4
US	Channel Islands	Sppit (Orizaba) Rock	<0.1	High	0	1
US	Channel Islands	Sutil	0.1	High	0	1
US	Channel Islands	Willows Anchorage Rock 1	<0.1	High	0	1
US	Channel Islands	Willows Anchorage Rock 2	<0.1	High	0	1
US	Farallon Islands	Southeast Farallon	0.7	High	1 - 1000	2

US	Farallon Islands	West End	0.2	High	0	2
US	Hawaiian Islands	Hawai'i	10530	High	>1000	4
US	Hawaiian Islands	Kaho'olawe	123.1	High	0	2
US	Hawaiian Islands	Kaua'i	1457.2	High	>1000	4
US	Hawaiian Islands	Ka'ula	0.9	High	0	2
US	Hawaiian Islands	Lana'i	375.4	High	>1000	4
US	Hawaiian Islands	Laysan	4.5	High	1 - 1000	1
US	Hawaiian Islands	Lehua	2.1	High	0	2
US	Hawaiian Islands	Lisianski	1.8	High	0	1
US	Hawaiian Islands	Maui	1919.1	High	>1000	4
US	Hawaiian Islands	Mokuhooniki Islet	0.3	High	0	1
US	Hawaiian Islands	Moloka'i	698.3	High	>1000	4
US	Hawaiian Islands	Necker (Mokumanamana)	0.6	High	0	1
US	Hawaiian Islands	Nihoa	1.0	High	0	1
US	Hawaiian Islands	Oahu	1576.5	High	>1000	4
US	Hawaiian Islands (French Frigate Shoals)	East	0.2	High	0	1
US	Hawaiian Islands (French Frigate Shoals)	Gin	<0.1	High	0	2
US	Hawaiian Islands (French Frigate Shoals)	Little Gin	<0.1	High	0	2
US	Hawaiian Islands (French Frigate Shoals)	Tern	0.4	High	1 - 1000	1
US	Hawaiian Islands (French Frigate Shoals)	Trig	<0.1	High	0	2
US	Hawaiian Islands (Kure Atoll)	Green	1.3	High	0	1

US	Hawaiian Islands (Midway Atoll)	Eastern	1.6	High	0	1
US	Hawaiian Islands (Midway Atoll)	Sand	5.0	High	1 - 1000	2
US	Hawaiian Islands (Pearl and Hermes Reef)	Grass	0.1	High	0	1
US	Hawaiian Islands (Pearl and Hermes Reef)	Kittery	0.1	High	0	1
US	Hawaiian Islands (Pearl and Hermes Reef)	North	0.2	High	0	1
US	Hawaiian Islands (Pearl and Hermes Reef)	Seal	0.1	High	0	1
US	Hawaiian Islands (Pearl and Hermes Reef)	Southeast	0.2	High	0	1
US	Johnston Atoll	Johnston	3.0	High	0	2
US	Kodiak Archipelago	Afognak	1874.0	High	1 - 1000	2
US	Kodiak Archipelago	Kodiak	9529.9	High	>1000	2
US	Kodiak Archipelago (Barren Islands)	East Amatuli	5.1	High	0	1
US	Kodiak Archipelago (Barren Islands)	Nord	0.8	High	0	1
US	Line Islands	Jarvis	4.4	High	0	2
US	Mariana Islands	Agrihan (Agrigan)	47.1	High	1 - 1000	4
US	Mariana Islands	Pagan	56.7	High	0	4
US	Marin Stormy Stacks	Bird Rock	<0.1	High	0	1
US	Mendocino Rocks	Bird Rock	<0.1	High	0	4
US	Mendocino Rocks	Casket Rock	<0.1	High	0	4
US	Mendocino Rocks	Franklin Smith Rock	<0.1	High	0	4
US	Mendocino Rocks	Wharf Rock	<0.1	High	0	4
US	Monterey Rocks	Benchmark Rocks	<0.1	High	0	2

US	Monterey Rocks	Castle Rock-03B	<0.1	High	0	2
US	Monterey Rocks	Castle Rock-07	<0.1	High	0	2
US	Monterey Rocks	Hurricane Point Rock	<0.1	High	0	2
US	Pribilof Islands	Otter	0.9	High	0	2
US	Pribilof Islands	St George	91.5	High	1 - 1000	2
US	Pribilof Islands	St Paul	11<0.1	High	1 - 1000	2
US	Prince William Sound	Naked	41.5	High	0	4
US	Pt. Reyes Rocks	Bird Rock	<0.1	High	0	2
US	SE Alaska Islands	Prince of Wales	6790.4	High	>1000	4
US	Wake Atoll	Wake	7.5	High	1 - 1000	4
VU	Vanuatu	Anatom (Aneityum)	158.5	Lower Middle	1 - 1000	4
VU	Vanuatu	Tanna	566.7	Lower Middle	>1000	4
VU	Vanuatu (Banks Islands)	Vanua Lava	330.4	Lower Middle	>1000	4
YE	Bir Ali Islands	Baraqa	1.1	Lower Middle	0	4
YE	Bir Ali Islands	Sikha	0.6	Lower Middle	0	4
YE	Socotra Archipelago	Abd al Kuri	136.5	Lower Middle	1 - 1000	4
YE	Socotra Archipelago	Kal Farun	0.6	Lower Middle	0	4
YE	Socotra Archipelago	Sabinya Islet 1	0.4	Lower Middle	0	4
YE	Socotra Archipelago	Sabniya Islet 2	0.8	Lower Middle	0	4
YE	Socotra Archipelago	Samha	41.5	Lower Middle	1 - 1000	4
ZA	Gansbaai Islands	Dyer	0.2	Upper Middle	1 - 1000	4
ZA	Gansbaai Islands	Geyser	<0.1	Upper Middle	0	4
ZA	Gansbaai Islands	Seal Rock	<0.1	Upper Middle	0	3
ZA	Prince Edward Islands	Marion	293.1	Upper Middle	0	4
ZA	Prince Edward Islands	Prince Edward	47.0	Upper Middle	0	4

ZA	Saldanha Bay Islands	Jutten	0.4	Upper Middle	0	4
ZA	Saldanha Bay Islands	Malgas	0.1	Upper Middle	0	4
ZA	Saldanha Bay Islands	Marcus	0.2	Upper Middle	0	4
ZA	Saldanha Bay Islands	Schaapen	<0.1	Upper Middle	0	4
ZA	Saldanha Bay Islands	Vondeling	0.2	Upper Middle	0	4
ZA	South African Rocks	Bakoven Rocks	<0.1	Upper Middle	0	3
ZA	South African Rocks	Clifton Rocks 1	<0.1	Upper Middle	0	3
ZA	South African Rocks	Clifton Rocks 2	<0.1	Upper Middle	0	3
ZA	South African Rocks	Dassen	3.0	Upper Middle	1 - 1000	4
ZA	South African Rocks	Hangklip Rocks	<0.1	Upper Middle	0	3
ZA	South African Rocks	Hospital Rock	<0.1	Upper Middle	0	3
ZA	South African Rocks	Jacob's Reef	<0.1	Upper Middle	0	4
ZA	South African Rocks	Matthew Rock	<0.1	Upper Middle	0	3
ZA	South African Rocks	Meeurots	0.1	Upper Middle	0	4
ZA	South African Rocks	Partridge Point Rocks	<0.1	Upper Middle	0	3
ZA	South African Rocks	Penguin Rock	<0.1	Upper Middle	0	3
ZA	South African Rocks	Robeiland	<0.1	Upper Middle	0	4
ZA	South African Rocks (Algoa Bay)	Bird	0.3	Upper Middle	0	4
ZA	South African Rocks (Algoa Bay)	Brenton Rock	0.1	Upper Middle	0	3
ZA	South African Rocks (Algoa Bay)	Jahleel	0.1	Upper Middle	0	4
ZA	South African Rocks (Algoa Bay)	Seal	0.1	Upper Middle	0	4
ZA	South African Rocks (Algoa Bay)	St. Croix	0.2	Upper Middle	0	4
ZA	South African Rocks (Algoa Bay)	Stag	<0.1	Upper Middle	0	4
ZA	South African Rocks (Buffeljags)	Voeleiland	<0.1	Upper Middle	0	4
ZA	South African Rocks (False Bay)	Seal	0.1	Upper Middle	0	3



ZA	South African Rocks (Lambert's Bay)	Bird	0.1	Upper Middle	0	4
ZA	South African Rocks (Paternaster)	Cape Columbine Rock	<0.1	Upper Middle	0	3
ZA	South African Rocks (Paternaster)	Egg	<0.1	Upper Middle	0	4
ZA	South African Rocks (Paternaster)	Seal	<0.1	Upper Middle	0	4
ZA	Stompneus Bay	Stompneus Bay Rock	<0.1	Upper Middle	0	3
ZA	Table Bay	Robben	5.6	Upper Middle	1 - 1000	4

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