## UC Santa Barbara

**Newsletters** 

### Title

NCOS News - August 2021

## Permalink

https://escholarship.org/uc/item/7tf1h61z

## **Authors**

Bender, Jeremiah Fahrner, Oliver Stratton, Lisa

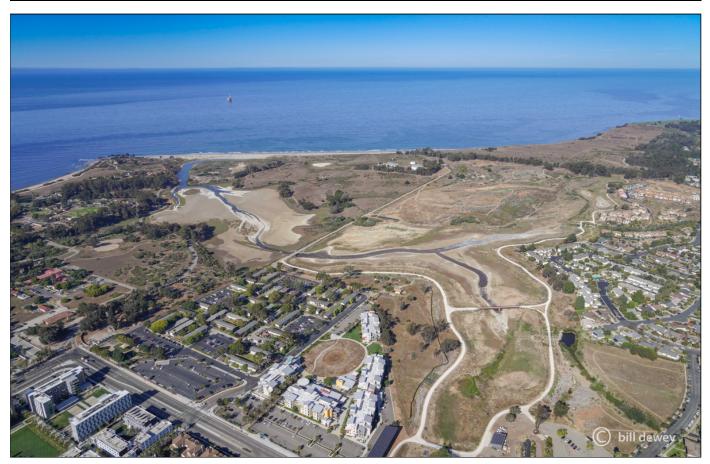
## **Publication Date**

2021-08-01

#### We recommend viewing this email in your web browser

## UC SANTA BARBARA North Campus Open Space Restoration Project

# NCOS NEWS August 2021



This latest aerial image by Bill Dewey was taken on August 2nd 2021.

#### **UPDATES**

#### Tidewater Goby Survey

Full Circle! UCSB 2017 Aquatic Bio graduate Evan Davies returned to NCOS to help with a recent fish survey. Evan was part of the original cohort of the Aquatic Invertebrate Monitoring student project initiated by Audubon Conservation Committee member Steve Senesec. This student project has already demonstrated how quickly invertebrates return to restored aquatic ecosystems. Bringing their federal permit to handle the endangered Tidewater goby, Evan and his colleague Hannah Donaghe from Cardno provided valuable help surveying the ecosystem from the mouth of Devereux Slough up to Phelps Creek in late July with seines and dipnets.



Evan Davies conducting the fish survey within Phelps Creek.



Hannah Donaghe using a dip net to survey for fish in the lower Devereux Slough near Venoco Bridge.

With so little rain this year, the whole ecosystem is experiencing high salinity (greater than 80 ppt) and low water levels resulting in challenging fish habitat. Four species of fish were found with the majority at the mouth - our local goby the Long Jaw Mudsucker, abundant Killifish and topsmelt, and in Phelps Creek the introduced mosquito fish and invasive crayfish. The large Long Jaw mudsuckers, which are 2-3 inches long, can displace the smaller tidewater gobies.



CCBER staff members Beau Tindall and Darwin Richardson seining at the mouth of Devereux Slough.

#### Mesa Trail

Due to competition for the fencing crew from the CalTrans freeway widening project, completion of the fencing to protect ground dwelling birds and animals from being impacted by off-trail meandering dogs and people has been slightly delayed to later this summer or early fall. Below is a draft of a sign that will be installed at the entrance to help keep wildlife safe.



The Mesa trail fence will protect sensitive species from the impacts of people and off-leash dogs.



This sign will be installed at the beginning of the Mesa Trail to provide visitors with information about their potential impacts on sensitive species.

#### Drought conditions at Devereux Slough

With last year's rainfall total of 7 inches and no significant rain after the mouth opened on January 28, this summer's water levels are some of the lowest experienced since the beginning of the project. In warm weather the slough can evaporate at a rate of approximately 1 inch per week. This evaporation is mitigated, or reduced, by cool, cloudy weather and by groundwater connections to the slough.



Salt crystals cover the shore of the slough as water levels drop.



Long-jawed mudsuckers, which are normally found at the bottom of the water column, can be seen seeking oxygen at the water surface.

#### Utilizing iNaturalist At NCOS

iNaturalist is an app that helps users identify various species as well as upload observations to a database. For those who want to learn more about community science at NCOS and how they can contribute, check out this how-to video in both English and Spanish created by CCBER interns and staff, funded by the Coastal Fund and Mosher Foundation.

Kids in Nature at UCSB's North Campus Open Space iNaturalist Guide 2021



Guia Para el Uso de iNaturalist 2021 de Kids in Nature bajo CCBER en UCSB



**Tours and School Visits** 

#### **Ethnobotany Tour**

Mark your calendars! CCBER will be offering an Ethnobotany focused tour of NCOS as part of Creek week on Wednesday, September 22nd at 5:15-6:45.

5/25/23, 7:37 AM





**Kids In Nature** 

Kids in Nature K-12 visits to NCOS are BACK! Please contact <u>ncos@ccber.ucsb.edu</u> if you are interested in setting up a visit!



### **NCOS Nature Guide Tours**

Coming this Fall! Monthly tours of NCOS offered by NCOS Nature Guides!

FEATURE STORY
<u>Community Insights at NCOS</u>



Local community member and NCOS Nature Guide Connie Weinsoff with her dog Poppy.

As the restoration of North Campus Open Space progresses, the site's benefits are increasingly felt. While we have already conducted surveys of the site's visitors to determine the top reasons people come out to NCOS, we wanted to take the chance to hear specific anecdotes from a number of community members regarding the role of NCOS in their lives. <u>Click here to read</u> insights from individuals who shared what NCOS means to them. <u>This feature story is continued on page 22.</u>

#### **VOLUNTEER OPPORTUNITIES**

#### "Second Saturdays" at NCOS

#### This month: August 14, 9-12



Help us restore and create NCOS with plants and more! Meet at 6969 Whittier Drive at 9am. Bring water, sunscreen, and wear a hat, clothes and shoes that are suitable for outdoor work.

**Thursdays - CCBER Greenhouse Associates** 



Come help transplant seedlings of native plants with the CCBER team from 9:00 - 12:00. To join, please send an email to <u>ncos@ccber.ucsb.edu.</u>

#### **COMMUNITY FORUM & PHOTOS**

We are interested in any observations of wildlife activity on NCOS, as well as plants and landscapes. Please send your observations, with or without photos, to <a href="https://ncos@ccber.ucsb.edu">ncos@ccber.ucsb.edu</a>. Thank you!



This barn owl flew in from Coal Oil Point Reserve and landed on a wire halfway up Venoco Road around 8:15 am. Photo By Miki Swick.



Monarch caterpillar on narrow leaf milkweed (Asclepias fascicularis). Photo by Jeremiah Bender.



Monarch butterfly on narrow leaf milkweed (Asclepias fascicularis). Photo by Jeremiah Bender.

Family Feeding



Red-tailed hawk feeding on ground squirrel. Photo by Jeremiah Bender.



Another red-tailed hawk, most likely a sibling or parent, lands on a lower branch and has its eye on that squirrel. Note the shielding behavior of the upper hawk. Photo by Jeremiah Bender.



The second red-tailed hawk joins in, but how long will this dinner stay peaceful? Watch the video below to find out! Photo by Jeremiah Bender.



#### The squabble begins! Video by Oliver Fahrner



After a couple minutes of fighting over the ground squirrel, the red-tailed hawk that caught the squirrel initially flies away. Photo by Jeremiah Bender.



The other hawk enjoys a free meal. Photo by Jeremiah Bender.

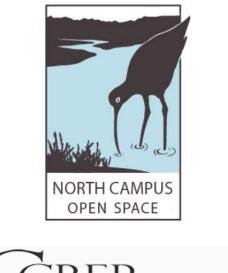
Received this email from a friend? Click here to subscribe to our mailing list.



For more information on the North Campus Open Space Restoration Project, <u>Click here</u>, or email <u>ncos@ccber.ucsb.edu</u>

Copyright © 2021 Cheadle Center for Biodiversity and Ecological Restoration (CCBER), All rights reserved.

NCOS Newsletter - August 2021



CHEADLE CENTER FOR BIODIVERSITY & ECOLOGICAL RESTORATION

Want to change how you receive these emails? You can <u>update your preferences</u> or <u>unsubscribe from this list</u>

 This email was sent to << Email Address>>

 why did I get this?
 unsubscribe from this list
 update subscription preferences

 Cheadle Center for Biodiversity and Ecological Restoration (CCBER) · Bldg 578 Harder South · UCSB, MC 9615 · Santa Barbara, CA 93106 · USA

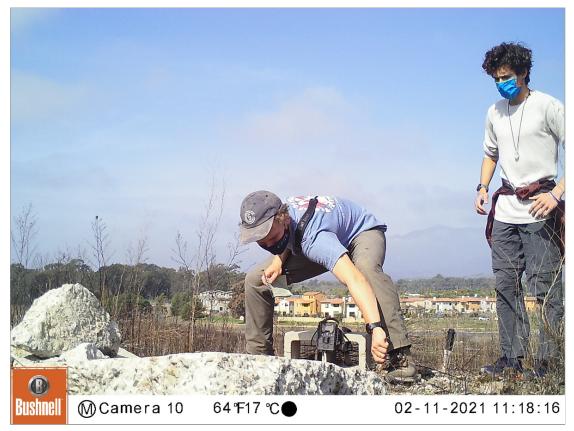




Home » Blogs » jeremiahbender's blog

## Community Insights at NCOS

As the restoration of North Campus Open Space progresses, the site's benefits are increasingly felt. While we have already conducted <u>surveys of the site's visitors</u> to determine the top reasons people come out to NCOS, we wanted to take the chance to hear specific anecdotes from a number of community members regarding the role of NCOS in their lives. Below are some responses from individuals who shared what NCOS means to them.



Undergraduate researchers Seth Frazer and Alistair Dobson setting up a wildlife camera at a hibernacula on NCOS.

For Seth Frazer, an undergraduate student at UCSB, North Campus Open Space has opened the door for multiple research endeavors. Seth is a part of a previously discussed wildlife monitoring project on NCOS that used wildlife camera footage to assess the function of hibernacula on site. This project is being presented at the Ecological Society of America Conference in August. Seth is also working on another wildlife camera project with the Director of CCBER, Katja Seltmann and CCBER Vertebrate Biologist, Chris Evelyn. One goal of Chris and Katja's <u>USDA Conservation and Innovation (CIG)</u> grant is to use artificial intelligence (AI) or "machine learning" to identify wildlife. This project will primarily focus on identifying different species of reptiles and amphibians, and will employ very small camera lenses to capture footage that will be used to program a computer to evaluate photos. Given that Seth helped sort through more than 80,000 images for his previous project, this is a project he is invested in! These cameras will be placed on NCOS, and depending on their success, may be expanded to insects on flowers and other locations. Outside of his research, Seth enjoys running the NCOS trails, as the dirt paths are perfect for his recovery days when he is training for marathons. A fan of both the common name and the showy flower, Seth's favorite plant on site is sticky monkeyflower, *Diplacus aurantiacus*, and his favorite animal is the ground squirrel, as this species frequently engages with the cameras near the hibernacula and is

#### Community Insights at NCOS | CCBER

critical in building habitat for other wildlife. Growing up, Seth always considered research to be something that seemed to be far away and difficult to achieve, so he greatly values the opportunities that NCOS provided him shortly after he transferred to UCSB. His hope going forward is that NCOS continues to introduce young students to field research and restoration work, so that future generations can aspire towards careers that they previously might not have known about.



This large vernal pool on the NCOS Mesa is one of many that Joanna Tang studies. Photo by Joanna Tang.

Joanna Tang is a PhD student at UCSB studying the ecological restoration of vernal pools. She is currently investigating methods to decrease exotic species invasion within this unique local habitat. Joanna utilizes the vernal pools on NCOS to conduct some of her research, and enjoys having an open space serve as her office. She often rides her bike out to NCOS when she visits the vernal pools that she studies, and while she is on site she enjoys watching the birds. Joanna's decision to pursue her PhD at UCSB was largely due to CCBER's history of restoring vernal pools, but equally important to her was the fact that active restoration of vernal pools was taking place on North Campus Open Space when she began her PhD. Scientists estimate that only 10% of California's historic vernal pool habitat remains due to widespread destruction from human development, making vernal pools an endangered ecosystem. Joanna is excited to be researching the vernal pools on NCOS, which she believes is a once in a lifetime restoration project to be involved with. Before starting her PhD research, Joanna worked in the field restoring NCOS with CCBER full-time staff, where she immediately felt welcomed and like she was a part of our restoration community. As she works through her PhD, she continues to be appreciative of the generosity and support she receives from CCBER. Joanna's favorite plant on NCOS is pickleweed, Salicornia pacifica, which is the primary species that grows adjacent to the slough. Her favorite animal is an insect from the Archaeognatha order, that is found in the NCOS vernal pools. These insects, commonly referred to as bristletails, are from one of the most evolutionarily primitive extant groups of insects on Earth. Joanna looks forward to the upcoming opening of NCOS' Mesa trails, and is excited about the future community building opportunities that NCOS will offer as well as the ecological progression that will take place on site in the years to come.



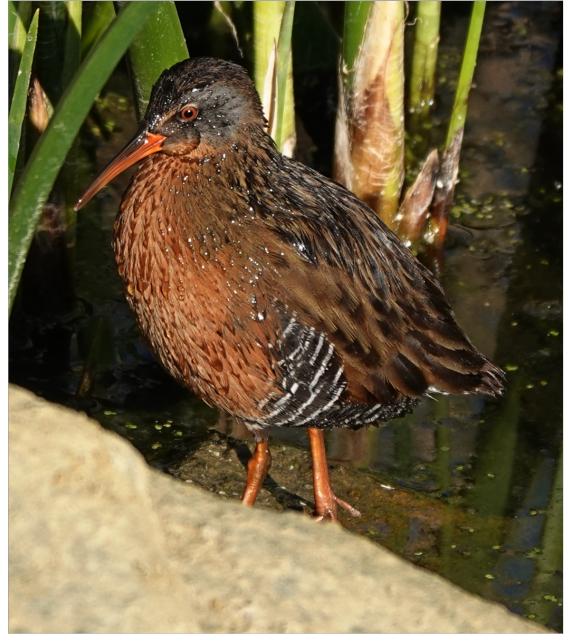
Local community member and NCOS Nature Guide Connie Weinsoff with her dog Poppy. Photo by Jeremiah Bender.

Connie Weinsoff is an engaged community member whose home neighbors North Campus Open Space. She recently has been training to become one of the first NCOS Nature Guides, preparing to share her knowledge of NCOS both while on tours and while casually engaging with individuals that are enjoying the site. Connie enjoys daily walks with her dog on NCOS' trails, during which she likes to observe the birds and other animals that call NCOS home. Living adjacent to NCOS allows Connie to appreciate the site each and every day. She utilizes the open space as a way to slow down and relieve stress, taking in the nature around her and leaving behind the chaos of everyday life. She especially noticed the importance of NCOS in her life over the past year while dealing with the COVID lockdown, appreciating the opportunity provided by NCOS to unplug from the daily news cycle. Each evening, Connie and her husband try to take the time to enjoy the sunset from their backyard, connecting with one another and the wildlife that they neighbor. She decided to become a Nature Guide because she had many questions herself about the different things she would observe on site. Connie is grateful for Lisa Stratton, Director of Ecosystem Management at CCBER, for all the work she has done to keep NCOS' neighbors updated on the progression and timeline of the restoration project. Connie likes observing many different species on site, including the rabbits, skunks, hawks, and owls that visit. Each evening she looks forward to seeing the Canada Geese and bats that often arrive at dusk. Through her Nature Guide training, she is learning more about various birds, insects, and plants on NCOS, enjoying each new species she learns about. Connie is excited to see different species of animals return to NCOS as native plants establish and the site continues to grow and develop physically. She is also excited about the future educational opportunities NCOS will provide to members of the community.



Local birder Libby Patten at NCOS. Photo by Libby Patten.

Libby Patten is a local birder who primarily visits NCOS for peaceful birding walks. While she is on the lookout for birds, Libby likes to observe the progress of the native plants growing in and the other developments taking place on the restoration site. She particularly enjoys observing the seasonal changes on site, noticing how the plants change with the changing weather as well as the water levels of the slough, and how these changes also affect which bird species are present. In addition to providing her an incredible area for birding, NCOS lifts Libby's spirits and gives her a hopeful feeling about the achievements that can arise from dedicated habitat restoration efforts. She loves introducing NCOS to new birders and hikers, and has even brought birding classes to site. The universal reaction from the people Libby has introduced to NCOS was astonishment and joy that this space has been restored. While it is difficult for her to choose just one favorite bird of all the wonderful and sometimes rare species she has seen on site, Libby has fun looking for shy birds that are difficult to spot such as the Virginia Rail, which can be observed popping out of the reeds to forage in the shallow waters of marshy ponds. Libby's keen eye allowed her to spot the Virginia Rail several times at Phelps Pond, and she was entertained by the funny grunting and squeaking call notes that this bird species makes. Libby hopes that the native plants continue to fill in on NCOS so that the habitat here can host even more bird species than it does presently. She also hopes that people continue to visit and truly appreciate this precious and rare wetland habitat, and that by learning more about it, these visitors will see the value in protecting and caring for North Campus Open Space.



This virginia rail photograph is one of Adrien O'loghlen's favorites from NCOS. Photo by Adrien O'Loghlen.

Adrian O'Loghlen recieved his PhD in Behavioral Ecology from UCSB based on research of song dialects in Brownheaded Cowbirds. He went on to study song variation in Song Sparrows at the University of Washington, Seattle for his postdoctoral research, and later taught numerous classes at UCSB and UW on the evolution of animal behavior, with a focus social behavior. He is now an active member of the Santa Barbara Audubon Society, and helps lead The Santa Barbara County Breeding Bird Study (BBS) along with Mark Holmgren, a fellow birding enthusiast and former CCBER Vertebrate Collections curator. Adrian enjoys visiting NCOS for birding opportunities as well as more general observations of nature. The habitat and wildlife on NCOS make it a great place for Adrian to get out into nature, motivating him to walk and explore the site. Adrian's favorite animal that he has observed on NCOS is the Burrowing Owl, which is a California Species of Special Concern due to extensive losses of its favored grassland habitat. Adrian hopes that going forward NCOS continues to be managed in a manner that prioritizes protecting its natural resources over catering to human activities.



CCBER staff member Carlomagno Calderón. Photo by Jeremiah Bender.

Carlomagno Calderón is a Restoration Assistant for CCBER who is currently working on North Campus Open Space. Carlomagno started with CCBER in the summer of 2018, and has spent the last few years actively restoring North Campus Open Space and witnessing first-hand the progression of the site. While working on NCOS, Carlomagno enjoys observing the different species of birds that visit the site as well as the many species of native plants that are growing in and providing necessary habitat for wildlife. Carlomagno enjoys showing his friends and family the restoration site so that they can see the progress being made. Before working on NCOS, Carlomagno was unaware of his love for plants and field work, but his time here led him to discover a predilection for plants and for working in ecology, which helped to shape his career trajectory. Carlomagno's favorite animals on site are bumblebees, which are becoming increasingly rare and are imperative for native plant pollination. He thinks bumblebees are amusing to watch, as he finds their behavior and movements quite interesting. His favorite plant growing on NCOS is Lanceleaf liveforever, *Dudleya lanceolata*, as it is one of the few native succulent species to this area and is also a plant that is difficult to find when out in nature, often growing on cliff faces or underneath rocks. Carlomagno hopes NCOS continues to receive funding to research and enhance this unique restoration project. He also hopes that NCOS will foster a new generation of dedicated restoration ecologists that will work passionately to preserve this open space. Community Insights at NCOS | CCBER



Professor Carla D'Antonio.

Carla D'Antonio is a professor at UCSB who in 2007 was co-chair with Duncan Mellichamp of the original committee that helped bring North Campus Open Space into fruition. She became part of the Science Advisory Committee for NCOS as it was formed, and her lab research has played an integral part in directing CCBER's restoration efforts. Carla likes to walk the trails on NCOS in the evenings for relaxation, and she also enjoys touring the site with Lisa Stratton, CCBER's Director of Ecosystem Management, utilizing these opportunities to brainstorm possible solutions for areas prone to invasive plants or with poor native regeneration. Before COVID-19 forced classes to move to remote learning, Carla would host labs for her class Ecosystem Restoration (ES/EEMB 128) on NCOS. She continues to incorporate interesting lessons on restoration into her lectures by referencing some of the work being done on NCOS. From the start of the project to the present, NCOS has had an important influence on Carla's teaching, as she was able to help plan project efforts before restoration began, and later used the site as an instructional aid when restoration was underway. Currently, Carla is able to inform her students of important principles of restoration by referencing NCOS and the progress that has been made here, emphasizing the value of human engagement and the diverse forms of knowledge and activities that helped build the restoration project as well as stressing the many benefits, from ecological to social and cultural, that stem from this largescale restoration effort. In addition to the impacts on her teaching, Carla appreciates NCOS for its proximity to campus, allowing her students to work and study in a nearby field setting. She also appreciates that the local community now has a beautiful space to enjoy and to foster the consideration of intriguing ecological questions as well as the social possibilities of restoration. Carla's favorite plant on NCOS is Purple Needlegrass, Stipa pulchra, mature stands of which she particularly enjoys blowing in the breeze in the evening light of a late spring day. Carla's hopes for the future of NCOS include continued engagement by the local community, use of the site by classrooms of all ages, and continued development of native plant communities, which will reduce weed infestation and increase the diversity and cover of native plants throughout the site.

We appreciate hearing these insights from our thoughtful community members that have already been enjoying NCOS and have even more hopes for the future of our restoration site. As we continue our restoration efforts of the site, we hope that NCOS continues to expand in its impact of our local community and that we accomplish the site goals that were expressed by our community members.

This article was written by CCBER Restoration Assistant Oliver Fahrner and edited and formatted for the web by Jeremiah Bender. Photographs are by Seth Frazer, Joanna Tang, Adrien O'Loghlen, Libby Patten, and Jeremiah Bender. Date: Monday, August 2, 2021 - 11:15

Contact Us

#### Community Insights at NCOS | CCBER

Copyright © 2007-11 The Regents of the University of California, All Rights Reserved.

UC Santa Barbara, Santa Barbara CA 93106 • Terms of Use

UCSB website

