UC Santa Barbara
Newsletters

Title
UCSB Restoration Register - May 2026

Permalink
https://escholarship.org/uc/item/120134rd

Authors
Bender, Jeremiah
Stratton, Lisa
Chapman, Wayne

Publication Date
2026-05-01

eScholarship.org Powered by the California Digital Library
University of California

We recommend viewing this email in your web browser

UC SANTA BARBARA
Cheadle Center for Biodiversity & Ecological Restoration

Restoration Register

May 2026



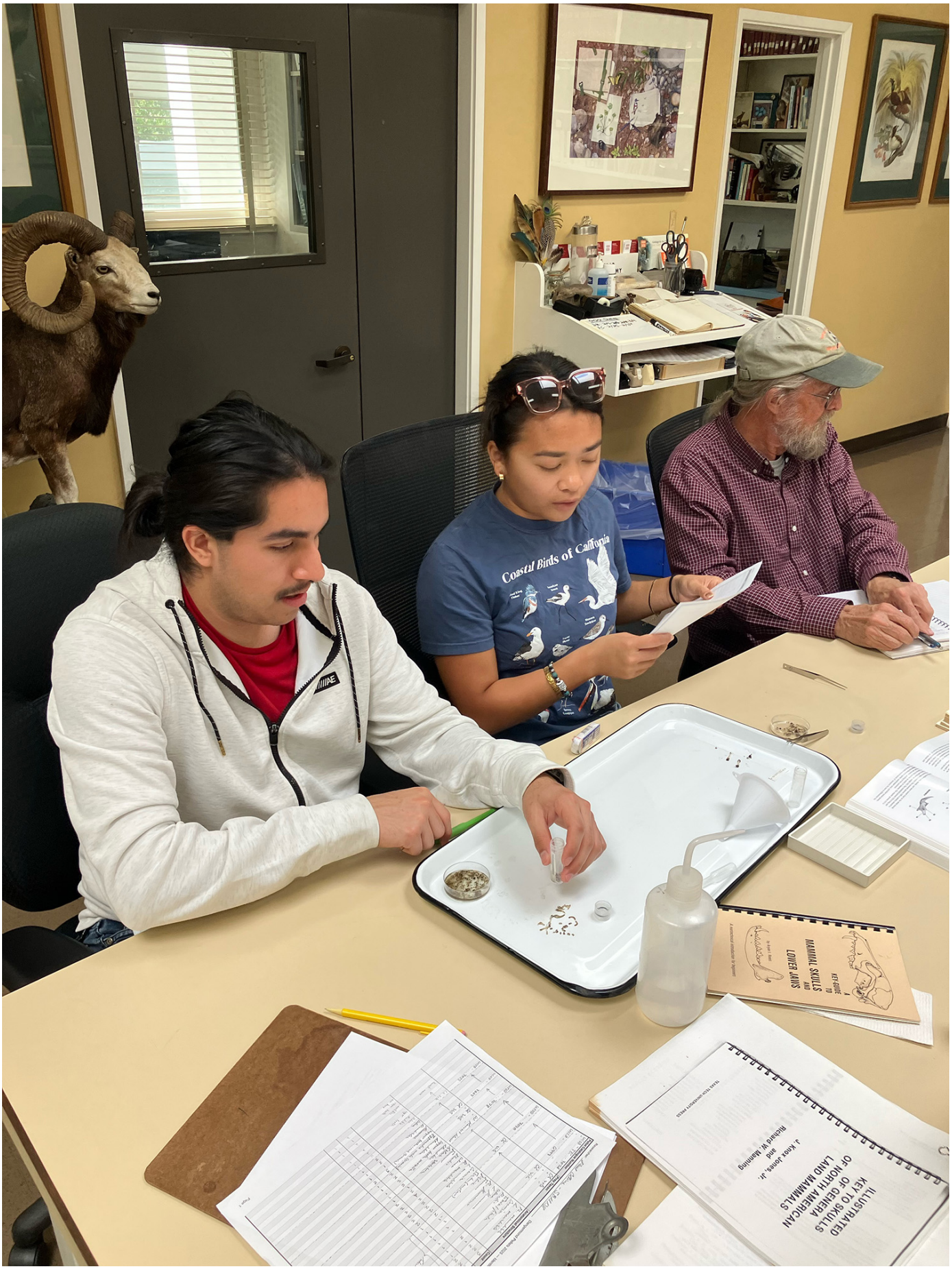
A newly hatched killdeer chick at NCOS on April 1, 2026.

Updates

Student Research Projects

Over the past three quarters, students in the Restoration and Monitoring Mentorship Program (RAMMP) have been developing research projects with direct applications for regional and local restoration and conservation. Following up on prior research from NCOS and drawing on the Cheadle Center's natural history collections and taxonomic expertise, students have been analyzing the diets of burrowing owls at the Cojo Terrace of the Jack and Laura Dangermond Preserve by dissecting pellets collected last year.

They found that burrowing owls at Dangermond rely less on invertebrate prey compared to NCOS, with California voles (*Microtus californicus*) being a frequent meal.


Coastal Birds of California
KEY TO SOME OF THE MAMMAL SKULLS AND LOWER JAWS
ILLUSTRATED KEY TO SKULLS OF GENERA OF NORTH AMERICAN LAND MAMMALS
J. Knox Jones, Jr.
and
Richard W. Manning

Student researchers Jibrahn Gonzalez and Jessica De Castro identifying contents of burrowing owl pellets under the guidance of Paul Collins at the Santa Barbara Museum of Natural History.

Closer to home, students are working to support adaptive management of the NCOS mesa and slope by exploring factors potentially inhibiting native plant establishment. Measurements of soil cores have shown that salinity is high at some locations and increasing over time as salts move up from deeper layers. As such, we are assessing the survival and growth of purple needlegrass (*Stipa pulchra*) under a range of salinities through a greenhouse experiment. We hope this will help us disentangle the role of high salinity relative to other limiting factors like saturated conditions in the wet months.



Abriel Lau experimentally applies saline solution to purple needlegrass (*Stipa pulchra*).

In the Cheadle Center's Aquatic Invertebrate Lab, students have been drawing on long-term monitoring data to understand ecological processes in the slough. Research foci include avian food webs, potential threats to the health of the estuary (such as a degraded tributary and invasive species), and public perceptions of aquatic invertebrates and their importance for estuary restoration.

Come check out student research at the Undergraduate Research & Creative Activities Poster Colloquium at Corwin Pavilion on Wednesday, May 13th from 9:30–11:30 AM and 12:00–2:00 PM.

Campus Point Restoration

Thanks to a combination of public and community support, the long-anticipated removal of the historic asphalt pad at Campus Point is moving forward. Funding from the County Resource Management Fund, along with grants from the Santa Barbara Foundation's Conservation, Environment and Public Trails program, the Coastal Fund, and generous private donors, has made it possible to break ground on this important phase of the Campus Point restoration effort.

This project, part of the broader Lagoon Restoration Plan, will remove approximately 43,000 square feet of remnant asphalt dating back to the site's military use and restore the area to native coastal habitat. Chris Berry, Campus Lagoon Steward, shared his excitement about the milestone: "I am really excited for this asphalt to be removed as it's the main barrier to restoration on the bluff. We've essentially planted everything we could up to the asphalt edge, so once it's gone it will really open up the rest of Campus Point to becoming a thriving ecosystem once again."



Pink outline shows 1 acre of full extent of asphalt, partially under ice plant.

Yellow outline shows approximately 0.5 acre of visible asphalt.

Green outline delineates the restoration area for Coastal Sage Scrub, Dune and Back dune swale.



Asphalt pad, looking north towards UCSB Campus.

Careful planning is guiding every step of the work to ensure protection of sensitive cultural resources. The asphalt will be removed using low-impact methods, with cultural monitors onsite to safeguard a known midden, a culturally significant deposit of shells and other materials from Chumash coastal foraging practices, often including abalone, mussel, and clam shells. Following removal, the site will be revegetated with native dune and coastal sage scrub species, including beach evening primrose (*Camissoniopsis cheiranthifolia)*, bush sunflower (*Encelia californica*), and coast goldenbush (*Isocoma menziesii*), among others. These efforts will help reestablish a more natural landscape while enhancing habitat quality and supporting biodiversity along the Campus Point coastline. The project will also provide opportunities for students, interns, and volunteers to engage in hands-on restoration and experiential learning.



Bush sunflower (*Encelia californica*) on Lagoon Island.

s'o' hil xus – Bear Spring Volunteer Day



Join us on Saturday, May 9, to celebrate the beginning of restoration efforts at the former Ellwood Marine Terminal site. Enjoy a guided tour, participate in planting activities, and receive your own s'o' hil xus – Bear Spring T-shirt!

We'll meet at the site at 9:30 AM. If you're able to walk, please meet us directly at the site. If you're driving, parking is available in the NCOS lot—please arrive there by 9:00 AM for a guided walk to EMT. Don't forget to bring water and a hat!



You can get involved by planting native oaks and coastal sage scrub, exploring the site on a guided tour, sharing your ideas for the future, and picking up a free T-shirt.

Please RSVP to ncos@ccber.ucsb.edu. We hope to see you there!



Directions from the NCOS lot to EMT.

New staff members



Emilee Doering



Zac Pfeifer

We are happy to introduce two new staff members, Emilee Doering and Zac Pfeifer.

Emilee graduated from UCLA in June 2025 with a degree in Environmental Science and a concentration in Environmental Systems and Society. During her time at UCLA, she contributed to a range of projects, including research on the use of eDNA for monitoring invasive species, native plant restoration work, and a study examining the effects of the urban heat island in Los Angeles. Following graduation, Emilee sought to continue her work in conservation and ecological restoration in her hometown, which led her to the Cheadle Center. After first learning about the Center through a community volunteer day, she began volunteering and assisting with research projects before ultimately joining the staff.

Zac previously worked as a cycling tour guide, leading bike tours in outdoor travel destinations across the United States. Following his passion for ecology, he transitioned into environmental restoration, first helping a friend establish a native plant landscaping business in Sonoma County. He then spent a season in Maui working in native plant conservation before returning home to Santa Barbara. Zac is excited to be working to restore the unique and special ecosystems of his hometown through his role with the Cheadle Center.

Harder Seep



Southwestern spiny rush (*Juncus acutus var. leopoldii*).

The Harder Seep restoration project continues to make steady progress, with native plant species establishing and thriving within this small yet ecologically significant site. Located just west of Harder Stadium, the Harder Seep is a perennial freshwater source that discharges slightly brackish water into the East Storke Wetland, a tidally isolated remnant of the Goleta Slough. These hydrologic conditions support a mosaic of ecotones and distinct plant communities, fostering a high level of biodiversity within a relatively confined area. The seep complex consists of four to five hydrologically distinct but adjacent features, each contributing to the site's ecological complexity.

Despite its modest size, the Harder Seep supports a remarkable assemblage of native plant species, including several that are uncommon on campus. Of particular significance are five taxa with California Rare Plant Rankings (CRPRs): Southwestern spiny rush (*Juncus acutus var. leopoldii*), branching phacelia (*Phacelia ramosissima var. austrolittoralis*), bitter gooseberry (*Ribes amarum var. hoffmanii*), cliff-aster (*Malacothrix saxatilis var. saxatilis*), and Santa Barbara honeysuckle (*Lonicera subspicata var. subspicata*).



Yerba mansa (*Anemopsis californica*).



Branching phacelia (*Phacelia ramosissima var. austrolittoralis*).



Pacific potentilla (*Potentilla anserina ssp. pacifica*).



Bitter gooseberry (*Ribes amarum var. hoffmanii*).

Ongoing restoration efforts are supported by the Wetlands Recovery Community Restoration Program, funded by the Wildlife Conservation Board and administered by the California State Coastal Conservancy.

Earlier phases of this long-term project were supported by the Associated Students Coastal Fund and the U.S. Fish and Wildlife Service's Coastal Program.

Feature Story

The Hidden Cost of Trees: Saving a Grassland Specialist



Burrowing owl sheltering in specially designed artificial burrow on the NCOS Mesa - November 2020.

In the fall of 2020, the Cheadle Center installed the first artificial burrows for burrowing owls in Santa Barbara County on NCOS. Since then, more have been installed at a few other locations, but many more are needed. This spring, we are embarking on the first large-scale effort to monitor and assess several properties specifically for this rare bird, and then make recommendations and install artificial burrows on them. For a more in-depth background on burrowing owl conservation at NCOS, check out our newsletter update from November 2024.

Recently, the 2025 State of the Birds Report was released, produced by a coalition of leading ornithological scientific and conservation organizations including the American Bird Conservancy, Cornell Lab of Ornithology, Ducks Unlimited, and the National Audubon Society. The full report can be found here. Alarmingly, birds from all types and habitats were found to be declining across the country, but none more so than grassland birds.



Burrowing owl on the Mesa at NCOS, October 2024.

Across America, the majority of grasslands have been degraded, developed, and converted to agriculture. In California, an estimated 22,000,000 acres of grassland once occurred; now less than 2,000,000 remain. Of the acreage that has survived development and conversion, none are pristine. One of the most detrimental impacts to grassland birds across the country is not what you'd expect; the encroachment of trees. Nowhere is this more evident than here. Blue gum eucalyptus are by far the most prevalent of these along the coast, where they reach enormous size, dwarfing oaks. These trees are celebrated and protected, often on behalf of raptors. The irony is that this is a major contributor to the rarity of our rarest raptor.

Our 2025 survey of the Cojo Terrace at the Jack and Laura Dangermond Preserve found that while planted trees account for just 1% of the terrace's cover, they effectively remove over 30% of the habitat from burrowing owls. Trees give significant advantages to habitat generalists like great horned owls and red-tailed hawks, which are major predators of burrowing owls and other grassland birds. When planted in grassland habitat, trees exert influences that are invisible to most observers, but very clear to grassland birds. For hundreds of yards in all directions they radiate fear and avoidance; they mean a predator is hiding. One of the most important ecological aspects of grassland habitat is large, unbroken spaces.



Western Meadowlarks are among several grassland-specific bird species that are in decline. This individual was observed at East Bluff. Photo by Daniel Forseth.

Other rare and declining grassland-specific birds in our area include the northern harrier, grasshopper sparrow, horned lark, and the western meadowlark. Many of the actions needed to preserve and restore habitat for burrowing owls benefit these species as well. This project is a small but significant conservation milestone in the region.

Volunteer Opportunities



Second Saturday Volunteer Day

EMT: May 9, 9:00 a.m. - 12:00 p.m.

Please RSVP to ncos@ccber.ucsb.edu. Meet at 6969 Whittier Drive at 9:00 a.m. Bring water and sunscreen, and wear a hat, clothes, and shoes that are suitable for outdoor work.

Greenhouse Transplanting



Thursdays 9:00 a.m. - 12:00 p.m.

Come help transplant seedlings of native plants with the Cheadle Center team. To join, please send an email to ncos@ccber.ucsb.edu.

Community Photos

We are interested in any observations of wildlife activity from our management areas, as well as plants and landscapes. Please send your observations, with or without photos, to ncos@ccber.ucsb.edu. Thank you!



Blue toadflax (*Nuttallanthus texanus*) on Lagoon Island. Photo by Susan Cook.



Red maids (*Calandrinia menziesii*) on Lagoon Island. Photo by Susan Cook.



California poppy (*Eschscholzia californica*) on Lagoon Island. Photo by Susan Cook.



Surf scoter (*Melanitta perspicillata*) at the Campus Lagoon. These nearshore diving ducks have a robust bill adapted for grasping mollusks and other benthic invertebrates. Photo by Jeremiah Bender.



Canada geese (*Branta canadensis*) with precocial goslings, which are able to walk, swim, and forage shortly after hatching, in the western seasonal pond at NCOS. Photo by Jeremiah Bender.



Gray buckeye (*Junonia grisea*) on golden yarrow (*Eriophyllum confertiflorum*). Photo by Jeremiah Bender.



White checkered-skipper (*Burnsius albezens*) on western vervain (*Verbena lasiostachys*). Photo by Jeremiah Bender.



Checkered white butterfly (*Pontia protodice*) visiting checkerbloom (*Sidalcea malviflora*). Photo by Jeremiah Bender.

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

Click here for more information on Cheadle Center project sites and management areas, or email ncos@ccber.ucsb.edu.

Click here to support our work.

Copyright © 2026 Cheadle Center for Biodiversity and Ecological Restoration. All rights reserved.

Our mailing address is:
Cheadle Center for Biodiversity and Ecological Restoration
Bldg 578 Harder South
UCSB, MC 9615
Santa Barbara, CA 93106

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