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UC SANTA BARBARA North Campus Open Space Restoration Project

NCOS NEWS *January 2023*

NCOS aerial photo taken on 12/26/22. Photo by Bill Dewey.

UPDATES

NCOS News Name Change

We're searching for a different name for the NCOS News! Our transition into the new version of the newsletter requires a name that represents the broader scope of content and we'd like to open up the process to newsletter recipients. Some of the names in the running are: UCSB Eco Restoration Reports, Nature's News, Coastal Conservation Stories, and Cheadle Center: Connecting with the Coast.

Please email ncos@ccber.ucsb.edu with your preferred name or new ideas for an updated newsletter name. Thanks!

NCOS Vernal Pools are full!

After the many storms this winter all our vernal pools are holding water and providing a unique habitat for

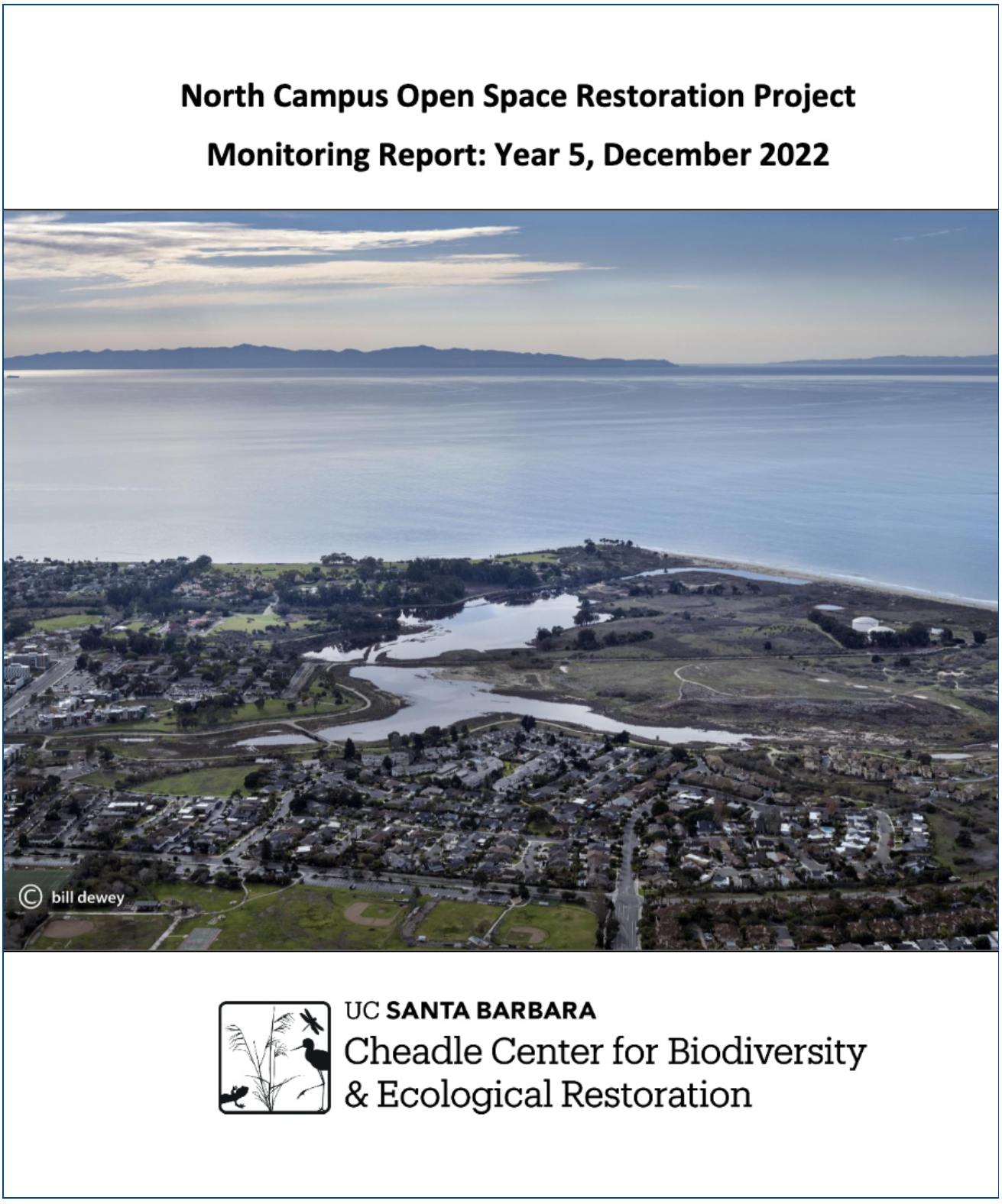
a host of invertebrates, birds, and mammals seeking freshwater.

Take a walk on the Mesa Trail to see the recently filled vernal pools.

Canada Geese in one of the upper Mesa Vernal Pools.

NCOS Year 5 Final Monitoring Report

The NCOS Year 5 Final Monitoring Report is out now! This report covers vegetation and hydrology monitoring primarily and also includes water quality, wildlife and results from special studies. The project can be considered a success and the funding allowed us to document the progress in detail which will provide important baseline data for future studies which will shed light on coastal resilience, flood reduction, ability of the system to keep pace with sea level rise, wildlife and plant responses.



Weed Warriors!

Weed Warrior Program has kicked off with at least 4 regular community members taking on special independent restoration projects to help keep NCOS looking great. Contact us at ncos@ccber.ucsb.edu if

you want to join this group of talented and caring individuals with mentorship from the Cheadle Center team.

Dedicated weed warriors have been hard at work at our Visitor Plaza area.

Get ready for wildflower displays at Campus Lagoon and East Gate!

Prescribed burns, native, locally sourced wildflower seeding, and careful weed management on Lagoon Island and on the bluff side of the Henley Gate in conjunction with all this rain promise a great wildflower display this winter/spring.

Prescribed burn on the Campus Lagoon on 9/14/2022.

Take a walk down the bluff from campus towards Goleta Beach or around the lagoon and keep your eyes peeled for this everchanging show of more than 10 species of wildflowers: Poppies (*Eschscholzia californica*), Miniature Lupine (*Lupinus bicolor*), Bush Lupine (*Lupinus arboreus*), Red maids (*Calandrinia menziesii*), Miniature Suncups (*Camissoniopsis micrantha*), Blue Toadflax (*Nuttalanthus texana*), snapdragon (*Antirrhinum nuttallianum*), Phacelia (*Phacelia distans*), Popcorn Flower (*Cryptantha clevlandii*), Blue Dicks (*Dichelostema capitatum*), and Goldenstar (*Bloomeria crocea*).

Red maids (*Calandrinia menziesii)* and Poppies (*Eschscholzia californica*) provide a dash of color at the Campus Lagoon. Photo by Susan Cook.

FEATURE STORY

Ringing in the New Year with NCOS Rainstorms

Storm flow at Phelps Creek on 1/09/23.

The intermittently tidal nature of the NCOS wetland system has been on full display during the past two weeks. For most of the year, there is a sandbar at the beach that blocks the connection between Devereux Slough and the ocean. This sandbar is breached and partially washed away when water levels in the slough exceed the height of the sandbar that sits at about 9.5 feet above sea level. The storm complex that started on December 31 deposited 1.74 inches of rainfall on the Devereux Slough watershed which led to a breach of the sand bar at 11:30 pm on new year's eve: out with the old and in with the new. **This feature story is continued on page 14.**

VOLUNTEER OPPORTUNITIES

"Second Saturdays" at NCOS

Rescheduled to January 21st, 9:00 - 12

Please RSVP to ncos@ccber.ucsb.edu

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 ncos@ccber.ucsb.edu.

Nature Guide Tour

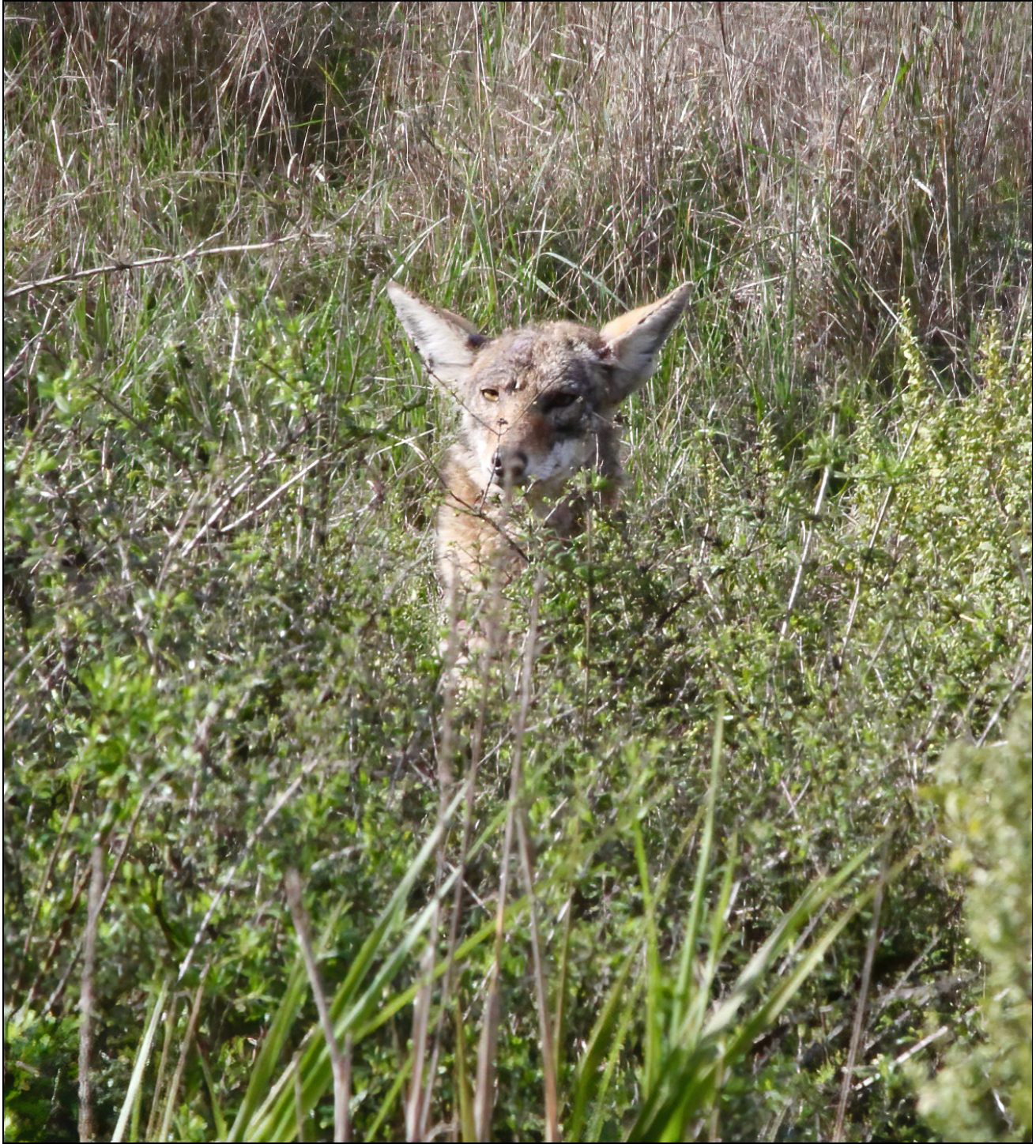
This month: January 21st, 9:30 - 11

Come take a walk around NCOS and learn about native plants and animals with a trained Nature Guide.

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 ncos@ccber.ucsb.edu. Thank you!

Black-crowned Night-heron reflecting on life in Phelps Creek. These stocky birds live in fresh, brackish, and salty environments and are the most widespread heron in the world. Photo By Daniel Forseth.



Coyote resting on the NCOS Mesa slope. Photo by Karen Lunsford.

Ruddy Duck between dives in the upper Western pond. Photo by Jeremiah Bender.

Say's Phoebe searching for airborne insects near the Western ponds. Photo by Jeremiah Bender.

Long-billed curlews rest on an island in the slough channel. Photo by Jeremiah Bender.

Dark eyed juncos search for tiny seeds in a mulched area of NCOS. Photo by Jeremiah Bender.

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

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NORTH CAMPUS
OPEN SPACE

CCBER
CHEADLE CENTER FOR BIODIVERSITY
& ECOLOGICAL RESTORATION

Ringing in the New Year with NCOS Rainstorms

The intermittently tidal nature of the NCOS wetland system has been on full display during the past two weeks. For most of the year, there is a sandbar at the beach that blocks the connection between Devereux Slough and the ocean. This sandbar is breached and partially washed away when water levels in the slough exceed the height of the sandbar that sits at about 9.5 feet above sea level. When the breach occurs, the system becomes tidal until the sandbar is rebuilt by wave action depositing sand on the beach. The breaching of the sandbar results in dramatically changing water levels as water rushes out of the wetland system into the ocean, creating a widening channel at the breach site, as seen in the photos below.

Devereux Slough breach following the rain on New Year's Eve Day. Photo by Ann Bishop, taken on 1/01/23.

The storm complex that started on December 31 deposited 1.74 inches of rainfall on the Devereux Slough watershed which led to a breach of the sand bar at 11:30 pm on new year's eve: out with the old and in with the new. The slough was tidal for several days until large waves eroded the Dunes at Sand's beach significantly and redeposited sand in the recently opened mouth, which led to water being impounded up to 7.8 ft elevation (about 3.5 feet deep at Venoco bridge). But not for long!

The sand berm at the mouth of Devereux Slough rapidly reformed to an elevation of 7.8 feet during heavy surf. Image taken 1/06/23.

Yet another heavy storm system on January 9-10 deposited 4.74 inches of rain, which breached the reformed sand berm and resulted in a water level of 5.5 feet elevation (about 1.2 feet deep at Venoco Bridge) as of January 10th. This storm illustrated the impressive flood capacity of the NCOS wetland system, as displayed by the video footage from 1/09/23 below. The design of the system, with seasonal ponds and shallow slopes, allows the water to be retained to support groundwater recharge and wildlife habitat.

Devereux Slough breach during rainstorm - click image to access video.

Devereux Slough breach during rainstorm - click image to access video.

Phelps Creek - click image to access video.

View from Phelps Bridge - click image to access video.

Long-billed Curlews foraging in the midst of the Devereux Creek floodwaters - click image to access video.

Devereux Creek flowing into the NCOS channel - click image to access video.

Western Ponds - click image to access video.

West arm and overflowing Devereux Creek - click image to access video.

Date:
Tuesday, January 10, 2023 - 09:15