

ANNUAL REPORT 2019-20



BIG CHANGES BIG POSSIBILITIES

This past school year marked our 6th as a growing natural history hub at UCSC. With a solid foundation established over our first five years, we engaged with yet another record number of undergraduates while building a more cohesive progression of experience-based natural history learning opportunities. We expanded introductory natural history experiences to hundreds of first-year students, broadened the diversity and number of students participating in our internships & classes, increased both the accessibility and preservation of our collections, and hosted numerous symposia to connect our community of students, alumni and professionals. Through creative remote-learning opportunities and a renewed commitment to expanding diversity, equity, and inclusion, we responded to the dual challenges posed by the Covid-19 epidemic and the race-focused protests across America. A new major gift enabled us to take significant steps toward expanding and enhancing our physical space on campus, protecting our collections, and growing our program to broaden our impact across campus and beyond, efforts that we will continue in the coming year.



The monumental challenges we all experienced this year have only energized us to stay focused on training the next generation of environmental leaders who communicate their understanding of the natural world and inspire stewardship in their communities.

2019-20 IN NUMBERS

6,043

USER DAYS



2,008

UNDER-GRADUATES

23

CLASSES



96

QUARTERLY
INTERNSHIPS &
VOLUNTEERS



9

STUDENT
AWARDS &
SCHOLARSHIPS

25

PAID
UNDERGRADUATE
POSITIONS



2

GRADUATE
STUDENTS

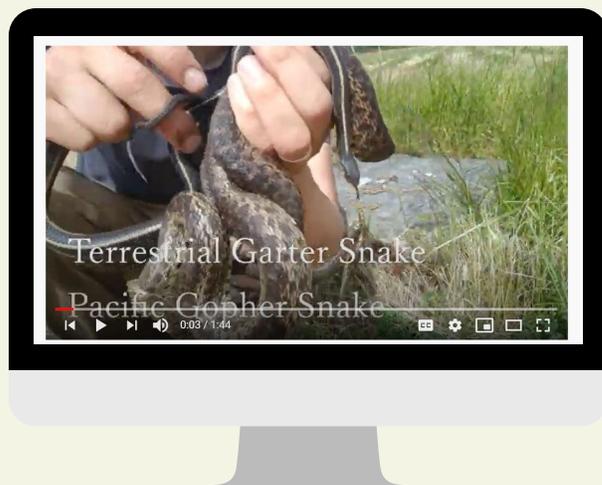
"I think my overall favorite part has been the excitement (& giggles!) every time I get to open up one of the cabinets in the collections and find a specimen, it never gets old. I feel very official!"

801

ALUMNI &
COMMUNITY
MEMBERS

INTERNS IN THE FIELD AND IN THE COLLECTIONS

With our taxidermy and Natural Reserve Resurvey programs in full swing, the Norris Center trained record numbers of students, over 40 interns in both Fall and Winter! Our Natural Reserve Resurvey project at Younger Lagoon Natural Reserve wrapped up with 1,098 specimens added to the Norris Center, and over 500 species documented at Younger Lagoon officially for the first time ever. As the pandemic pushed us online, we engaged with our interns to help analyze camera trap data, continued with specimen digitization projects, made videos about campus natural history, and helped us design exhibits for our upcoming Fall 2020 event. The work in the Norris Center collections never stops!



SUPPORTING MORE STUDENTS

With generous help from donors and the UCSC Student Fee Advisory Committee, we supported 25 paid quarterly student positions. Students worked on a variety of projects, including surveying Younger Lagoon, creating videos for Tuesday Newsday, monitoring raptor activity along the Pajaro River, and digitizing our collections. Stipends make working at the Norris Center accessible to a larger more diverse group of students. We are extremely proud to continue offering and expanding this financial support to larger cohorts of students in the future.

"The highlights of my internship were georeferencing some interesting specimens in fun locations and exploring a lot of local and faraway regions through mapping!"



"I got a glimpse of what field work is and the amount of physical work you will do. I really liked this internship, due to the fact that I was doing work but at the same time it was stress relief from all my school work. So it prepared me by thinking of my future job/work in reptiles or field work in general."

ENGAGING CLASSES

The demand for natural history classes continued to be high: we had over 100 applicants apply to our second offering of our Natural History of Fungi class and over 50 for Natural History of the Reptiles and Amphibians. In the fall we partnered with the UC Natural Reserves to engage with over 600 first-year students through student-mentored “field inquiry nature exploration hikes” as part of their residential college core classes. While several of our spring classes were either canceled or modified to accommodate remote learning, we pivoted quickly and continued to support instructors and a broad diversity of students by providing field-based videos and virtual museum field trips.

- Natural History of UCSC
- Curation of Natural History Collections
- Introduction to Natural History Illustration
- Natural History of Reptiles & Amphibians
- Natural History of Fungi
- Introduction to Ecology
- Entomology
- Freshwater Ecology
- Senior Capstone



Natural History of Fungi camping & collecting trip to Big Basin State Park



- Biodiversity in the Anthropocene
- Introduction to Field Research (4 sections)
- Herpetology
- Ornithology
- Systematic Botany
- Mammalogy

- Magnified Imagination
- Forms and Ideas
- CSUMB Science Illustration
- Merrill Core Course
- Carson Core Course



TRANSFORMING OUR COLLECTIONS



A grant from the Institute of Museum and Library Services funded a visit from professional building and museum collections assessors in August 2019 who provided valuable suggestions to improve our space and collections management going forward. We completed nearly 75% of the recommendations within two quarters, which will directly ensure our collections last for hundreds of years to come. We are thrilled that a new donation will enable us to make major changes to our collections space. Among many rehousing projects, we plan to separate out our teaching collections, and to install space-saving compactor cabinets to better store our collections. We also took large steps to continue to make our collections digitally available. We added our bird collection to an online collections management system (Arctos), and, for the first time ever, made all of our collections (totaling over 90,000 specimens!) searchable on the biodiversity observation aggregator GBIF, exponentially expanding the number of people that can search, download and use our specimen data.



Collections Assessment for Preservation Report
Kenneth S. Norris Center for Natural History

Report date: October 27, 2019

UCSC:Bird:1006 UC Santa Cruz: Hahn Student Services
Dendroica townsendi North America, United States, California, Santa Cruz County
28-Nov-2006 (2006-11-28)

skin Comment or report bad data [0][0]
Kenneth S. Norris Center for Natural History

first prevnext last
Record 1 of 68

[expand all] [collapse all]

Identifications
Dendroica townsendi
Animalia; Chordata; Aves; Passeriformes; Parulidae; Dendroica townsendi
Chipe negroamarillo; Townsend's Warbler
Identified by Christian Schwarz on 2006-11-28
Nature of ID: features

Collector(s)
collector Christian Schwarz
preparator Tonya M. Haff

Links

CONNECTING WITH COMMUNITY

Our public events kicked off with our second annual taxidermy demonstrations at the Santa Cruz Museum of Natural History's Halloween "Museum of the Macabre" Celebration. Our winter quarter natural history symposium was attended by over 100 students and community members and featured presentations from senior student projects and alumni working in natural history-related fields. During spring quarter, over 80 people tuned in from around the country to our first virtual webinar, which featured student project presentations, readings about Ken Norris, and nighttime astronomical observations. Administrative Director Chris Lay presented a UC-wide field safety webinar to over 100 field instructors and researchers.



What is a Safe Learning/Working Environment?

Creating a culture within your group that emphasizes:

- Effective Communication
- Mutual Respect
- Physical/Emotional Safety of Everyone
- Shared Responsibility for the Group's Wellbeing

A group of people sitting on the ground in a field, possibly during a field study or outdoor activity.

Welcome to Shelter in Nature!

Shelter in Nature
Thursday, May 7
7:30-8:30 pm

Kenneth S. Norris
Center for Natural History

If you're just joining us, take a moment to reflect on:

- An interesting nature observation/experience you've had while sheltering OR
- An appreciation you have for the natural world

Share one of these with us via the Zoom chat feature. Include your:

- First name (or just write anonymous)
- Your location (like Santa Cruz, Eastern Sierra, etc.)
- Your appreciation or observation in 1-2 sentences

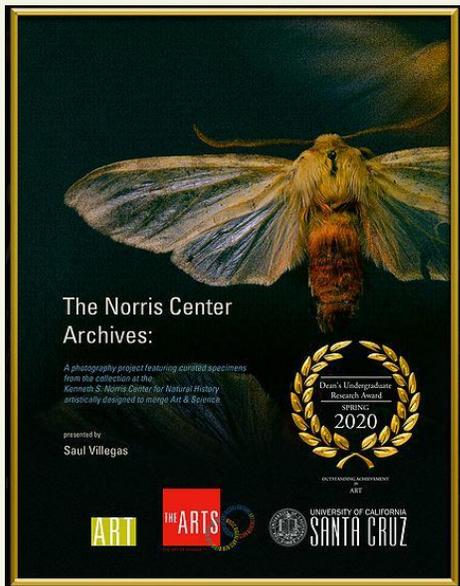
8:04 / 1:01:33



Some of our alumni speakers from our Winter Symposium

ART & SCIENCE ARE THRIVING

Our yearly public event, *Uniting Art and Science to Ignite Inquiry* at the Santa Cruz Museum of Art and History, showcased the wide-ranging and inspirational outcomes of the first two years of our art-science residency. Artists and scientists partnered to create illustrations, 3D flowers, video simulations of upper campus in a changing climate, and more. We offered a fun variety of extra-curricular art workshops, including Trompe l’Oeil, printmaking, and a new nature writing workshop taught by renowned author Gary Nabhan. Our Introduction to Nature Illustration class continued to be wildly popular with three offerings, including two online. Our fabulous instructor, Emily Underwood, also created several online instructional videos for anyone interested in developing their nature drawing skills.



Artwork created by senior Art student Saul Villegas (left) and Introduction to Nature illustration student Luis Esquivas (right).



EXPANDING THE WORK OF RANDALL MORGAN

We continued to digitize data from Morgan's insect specimens and supported student research using his collections. We transcribed hundreds of pages of Morgan's field journals and published Morgan's unfinished monograph on the clover genus *Trifolium* on our website. We also continue to support a statewide effort to digitize the phenology of the California flora, which incorporated many of Morgan's plant specimens. Finally, we re-envisioned the second phase for the Morgan Initiative, in which we strive to continue Randy's passion for training the next generation of naturalists by providing financial support to a cohort of students who will conduct resurveys at many of Morgan's collection sites beginning in Spring 2021.

Phenology of Syrphidae:

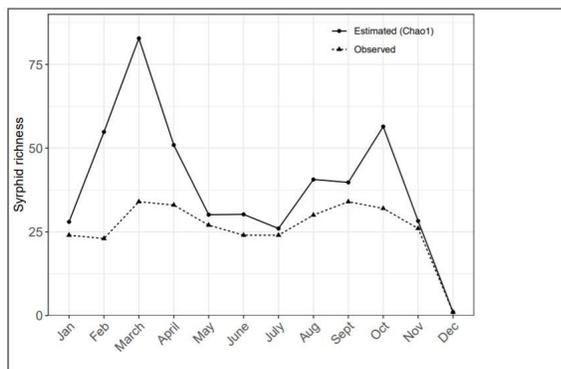
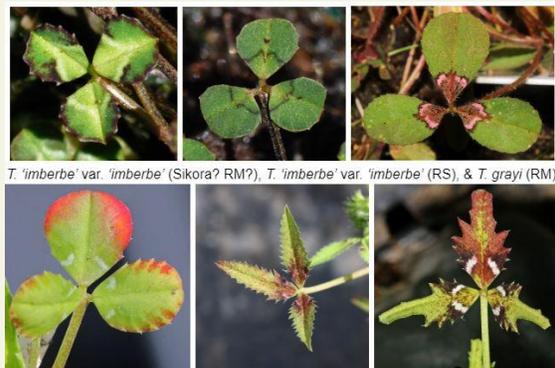


Chart 3. Syrphid richness raw count and estimation by month

Graph showing syrphid fly species diversity by month from undergraduate student Maggie Tomasello's senior project



Diversity of leaf morphology in California clovers

"An ankle-high sea of dazzling gold, pink, white, purple, green, each tiny flower vibrating at the slightest hint of a breeze, or bouncing under the takeoffs and landings of its pollinator—a great dance of insects as multicolored and multishaped as the flowers they dance over. A great panorama."

R. Morgan, describing the valleys of California

COMMUNITY SUPPORT INSPIRES GROWTH

We are grateful to our generous supporters who contributed over two million dollars in this record fundraising year. These donations will allow us to make progress on many strategic goals, including improving our facilities, offering more paid internships and research opportunities for undergraduates, supporting graduate students and our new full-time assistant director to mentor students and manage our collections, growing our successful art-science initiative, expanding our teaching and leadership training, building our post-graduation career support, and growing our endowment. Thank you so much for your continued enthusiastic support!

\$10,000+

Anonymous
March Conservation Fund



\$1,000 - \$9,999

Community Foundation of Santa Cruz
County
California Native Plant Society, Santa Cruz
Chapter
Linda Locatelli and Gordon Lion
Robert Weiner and Karen Rhodes

\$200 - \$999

Anonymous
Linda Brodman
Ellen Van Gelder
Jane Orbuch and Bryan Cockel
The Peattie Family Trust
Elizabeth Rouan
Schwab Charitable Fund
Dan and Karen Warrick
Linda Wilshusen and Rock Pfothenhauer

Up to \$200

Jenny and John Anderson
Dennis Brooks and Thien Tran
Linda Burman-Hall and Tim Shea
Julia and Steve Davenport
Julie M. Evens
Abigail Faulkner and Hobart Guion
Bartley Fong and Carolyn Kernkamp
Edith Frick
John and Peggy Holl
Neal Kramer
James and Christina Martin
Caroline Niblett
David Pacini
Louise Pearse
Dorris Welch

NEW LEADERSHIP NEW POSSIBILITIES

This year, Karen Holl stepped out of the Norris Center faculty director role. A true force of nature, Karen's leadership and creative vision transformed the Norris Center from an idea into a thriving resource that inspires thousands of students and community members each year. We owe much of our success to Karen's creativity, organization, hard work, flexibility, and commitment to students. Whether through her clever ideas for the titles for our public events or her working with students on project blogs, we could always depend on Karen as an ingenious problem solver. Her tireless hard work, whether in proofreading a grant proposal for the fifth time or scrubbing the carpet before a public event, inspired all of us to live up to her example. She always made time to work directly with students and she played a major role in creating a solid financial foundation for the Norris Center. Fortunately for us, she will continue to serve in an advisory role as a member of our Executive Board.



We are extremely grateful that professor Rita Mehta from the Ecology and Evolutionary Biology Department will step in as our new Faculty director. Rita has been a long-time supporter and donor to the Norris Center, dating all the way back to our first open house in 2010! She has been an active member of the Norris Center Executive Committee for several years. She has a deep passion for natural history collections and vertebrate organismal biology. She is a revered teacher and mentor to many graduate and undergraduate students. And she has also served as the chair of the UCSC admissions committee for the last several years. We couldn't be more excited to have her step in to follow in Karen's footsteps.

Many thanks to Karen and Rita for their dedication and leadership!



A RENEWED COMMITMENT TO INCLUSION

This coming year, we are especially inspired to continue Ken Norris' commitment to building resilient communities of naturalists. The enormous challenges of 2020 have re-energized our beliefs that all people deserve the opportunity to develop a deep connection with the natural world and that inclusion and equity advances both justice in our society and excellence as naturalists and conservationists. At our student-alumni symposium in March, we completed and displayed a new exhibit about expanding the diversity within the Norris Center community. This summer, we are nearing completion of a new public exhibit to be displayed at the San Lorenzo Valley Museum in Fall 2020 about expanding the diversity of naturalists throughout the entire community of Santa Cruz. And through strengthened collaborations with other campus programs this coming year, we aim to provide our students with even more meaningful accessible opportunities to develop their skills as the environmental leaders of the future.



Part of the team of Field Inquiry Mentors who introduced natural history skills to over 600 first-year students