The 2018-19 year marks our five year anniversary. In 2014, we celebrated the beginning of the Norris Center at UC Santa Cruz with a generous endowment gift from the David and Lucile Packard Foundation. Since then we nearly doubled our endowment due to several generous donors while creating a vibrant natural history program that furthers the legacy of Ken Norris and natural history education at UC Santa Cruz. As we continue to grow and pass new milestones, we are committed more than ever to igniting passion for nature amongst all UCSC students and supporting their path from inspiration and education to leadership and positive action in their post-UCSC lives.

Ken Norris once noted that he “was a naturalist down to my toes and fingertips—teetering between art and science, seeking synthesis.” This year, we achieved greater synthesis among many strands here at UCSC and the broader community. Whether launching a new collaboration with our Natural Reserves to conduct new biological surveys and create comprehensive collection resources, pairing more undergraduate artists with researchers across campus to ignite inquiry, gaining new insights into local plant/insect relationships through our work on Randall Morgan’s collections, or inspiring deeper observation and appreciation through artwork created at our magnificent natural reserves, we continued to engage our community in powerful direct experiences with the natural world. Our expanded staff and graduate student mentors this year helped us reach more students from diverse backgrounds and supported substantially more hands-on opportunities, from introductory internships to more advanced longer term paid positions.

In this report we summarize our accomplishments this year as we excitedly look forward to our next next five years.
2018-19 IN NUMBERS

- Undergraduate Students: 1,848
- Alumni & Community Members: 423
- Quarterly Internships & Volunteers: 85
- Student & Community User Days: 7,117
- Classes: 36
- Paid Quarterly Undergraduate Positions: 27
- Graduate Student Mentors: 2
- Student Project Awards & Scholarships: 32
MANY OFFERINGS FOR MANY INTERESTS

In the mix of over 30 classes we supported this year were two new introductory classes funded directly by the Norris Center: Natural History of Reptiles & Amphibians and Natural History of Fungi. While the number and diversity of our introductory field-based classes continued to grow, there is still unmet demand.

- Natural History of Campus (2 sections)
- Curation of Natural History Collections
- Natural History Illustration (2 sections)
- Natural History of Reptiles and Amphibians
- Natural History of Fungi
- Natural History of Birds
- Natural History Field Quarter
- Introduction to Ecology
- Freshwater Ecology
- Ecological Field Methods
- Mammalogy
- Systematic Botany
- Plant Physiological Ecology
- Plant Disease Ecology
- Introduction to Field Research (6 sections)
- Comparative Vertebrate Anatomy (2 sections)

“This course was an amazing way to get some field experience and check out local herps.”

“...as 'active' as learning gets, and I feel so full of skill and knowledge and the ability to continue to build that knowledge for myself. I feel so much more prepared to graduate and apply to field work and work with people.”

Natural History Field Quarter 2019 Student

Biodiversity in the Age of Humans
Introduction to Environmental Policy and Economics
Art 2D Foundation
Introduction to Printmaking
Leadership Through the Lens of Outdoor Risk Management
CASFS Farm Apprenticeship Program
CSUMB Science Illustration Program
COSMOS Summer Science Program
OSHER Lifelong Learning Group
Santa Cruz Forest School
Doris Duke Conservation Scholars Program
Monarch Community School
MANY HANDS FOR MANY HANDS-ON OPPORTUNITIES

Our internships expanded exponentially thanks to the organization and mentorship of our new half-time Assistant Director Alex Krohn. We more than tripled our offerings, from an average of 6 interns per quarter last year to 20–30 per quarter this year. This included two special year-long paid internships, sponsored by the Chancellor's Undergraduate Internship Program and the Professional Career Development Program. Working on a variety of topics from collections management to taxidermy to student outreach to our new collaborative UC Natural Reserve Resurvey project, our interns formed the core of our growing community.

"I loved how much we were given flexibility to mess up and learn in actual practice. I really enjoyed the internship. It was so much fun and so interesting to skin the animals, see the anatomy once we were inside, and watch the whole animal transform throughout every step."
OUR COLLECTIONS CONTINUE TO GROW IN NUMBER AND USE

We continued to grow as an important local resource for natural history collections along the central California coast. This year, we made significant improvements to the accessibility and preservation of our collections, including new storage drawers, much improved insect pest monitoring, and better earthquake preparedness. With the help of several interns, we started a collections-wide effort to add specimen data to Arctos, an online collections management database. A diverse team of staff, interns, and volunteers made numerous additions to our bird, insect, plant, fungi, and lichen collections. Scientists used our specimens in several publications, including a revision of the fungal genus *Xerocomellus* and a new field guide to grasses of Oregon and Washington.

Our dedicated community volunteers have dramatically improved our collections over many years. This year they continued work on our plant and lichen collections while mentoring several of our staff and interns. This included taking the lead helping us contribute to a multi-institutional California-wide vascular plant phenology project.
We continued to focus on the collections of Randy Morgan. Due to generous donor support of the Morgan Initiative over the last two years, we continued our progress identifying, digitizing, and analyzing the data associated with the Morgan Insect Collection. With nearly 25,000 pollinator specimens now digitized, much of his collection data is now available to the global scientific community. We supported several undergraduate projects using Morgan’s data, including an analysis of how the diversity of Lycaenid butterflies have changed in Santa Cruz and a new field guide to local fly pollinator species in the Syrphidae family. With our well-developed digitization protocol, we are excited to continue digitizing and studying more of Morgan’s 70,000+ insect specimens in the years to come.

Undergraduate Jessica Correa and Norris Center Director Chris Lay at their joint presentation about syrphid flies to the Santa Cruz Chapter of the California Native Plant Society

Undergraduate Alexandra Ahmad’s poster summarizing Morgan’s insect collection
A RECORD YEAR FOR STUDENT SUPPORT

This year we increased our support for a wide diversity of undergraduate projects and scholarships, ranging from students participating in research with UCSC faculty to community education projects as part of our Webster Fellows program—a collaboration with the Santa Cruz Museum of Natural History. We are especially proud to be able to offer stipends to student interns who, due to financial challenges, could not have otherwise participated in the opportunities we offer. We are strongly committed to expanding this support in the future.

Undergraduate Sara Ford Oades leads a group analyzing the causes of Monarch butterfly mortality in Santa Cruz.

Undergraduate Christian Lowson examined ancient bison DNA from Russia to help piece together their lineage. A new blog page on our website describes his work and many other Norris Center-funded projects. The bison illustrations accompanying this project were created by undergraduate Ashley Ersepke.

“My unforgettable experience these past 10 weeks in the Natural History Field Quarter community would not have been made possible without your generous help, support, and inspiration. I do believe in the saying, “where there is a will there is a way”. This is how I felt about NHFQ, however the reality for many young people of color are financial barriers that stand between us and our dreams. So my gratitude, respect, and appreciation are beyond measure.”
Our Art-Science Initiative continued to grow this year. We sponsored two sections of our wildly popular Introduction to Nature Illustration class and five public nature art workshops. We hosted a 5-week long nature art exhibition, *Reserves of Inspiration*, a collaborative art show with our UCSC Natural Reserves partners. The show featured 3 main alumni artists and over 30 other student and alumni artists. And we sponsored another year of science/art residency projects involving undergraduate artists and faculty researchers. After 2 years of these projects, we are thrilled to have the opportunity to exhibit some of them to the public in November 2019.

Undergraduate Alejandra Rueda made banner flags to bring awareness to the many animals that will be negatively affected by a US-Mexico Border Wall.

Graduate students Paloma Medina and Jessica Kendall-Bar teamed up to reimagine a biologically accurate version of *Finding Nemo*.

Our Nature Art exhibition featuring artwork from all 5 UCSC-managed natural reserves was a huge success with nearly 1,000 visitors!
GENEROSITY IS A TEAM EFFORT

We are grateful to the nearly 200 supporters that contributed over $110,000 to our growing programs this year. This included a Giving Day campaign that raised over $10,000 for student stipends to lead biological survey teams as part of our Natural Reserves Re-survey project. As we celebrate our first five years, we are proud of the solid foundation we have created. As we look forward to the next five years, we are eager to blossom into a resource that reaches all parts of our diverse campus and beyond. Thank you so much for your continued enthusiastic support!

$10,000+
March Conservation Fund
Joanna Miller
TRA Fund
Thirty Petals Fund

$1,000-$9,999
Fungus Federation of Santa Cruz
Google Matching Gifts Program
John and Peggy Holl
Karen Holl and Michael Loik
Kathleen Kenyon
Robert Stephens
Robert Weiner and Karen Rhodes

$200 - $999
Jenny and John Anderson
Linda Caplinger
Phil and Margaret Carpenter
Tamara and Gerry Doan
Alisa J. Fineman
Ted Goldstein and Jessica Bernhar
Amy Haberman
Loren and Kristen Kinczel
Jeannine Kosheer
Anna Landauer
Linda Brodman
Don Moore
James J. Moore
Ingrid Parker and Greg Gilbert
Schwab Charitable Fund

Up to $200
Elizabeth Abrams and Joe Lofreddo
Gary Adest
Aiman Akhtar
Miranda Allen
Jean and Frank Andrews
Susan Arnold
Emily Bamett
David and Melca Belanger
Eli Jackson Bernstein
Joseph M Blasher
Michael and Frances Bolte
Dawn Breese
Christi Bricknell
Dennis Brooks and Thien Tran
Adam Bryant
Jennifer Burle
Linda Burman Hall and Tim Shea
Jack Carter
Marie-May Carlson
David and Janet Carle
Kevin Condon
Jessica Correa
Chice Davison
Julia and Steve Davenport
Gage and Lily Dayton
Simone Des Roches
Diane Donham
Elizabeth Evans
Walter and Janet Evans
Up to $200 continued
Katie Excoffier
Abigail Faulkner and Hobart Guion
Kathleen and Robert Ferraro
Bartley Fong and Carolyn Kernkamp
Stacy Frank
Matt Freeman
Dan Frisch
Edith Frick
Brook Gamble
Tanya Gardner
Steven and Elise Garrett
Kyle Geib
Steve Glissman and Roberta Jaffe
Serge Glushkoff and Mayumi Takata
Megan Gnekow
Judith Golub
Allison Gong and Alexander Johnson
Sean Hastings
Anne Hayes and Daniel Mountjoy
Rebecca Hendricks
Nicolette Hodgson
Eileen Hofmann
Robert and Christine Holo
Catherine Hsu
Jenna Hurley
Philip Johnston and Barbara Lorimer
Alex Jones
Lyubov Kaplanskaya
Al and Carole Kelley
Laurie Kiguchi and Steve Reed
Laura Krieg
Alex Krohn
Douglas Krohn
James Krohn
Meaghan Krohn
Jean Langenheim
Rosa Lara-Fernandez
Janice and Guy Lasnier
Chris Lay and Elizabeth Andrews
Renee Lebeuf
Constance Leshin
Julianna Mandler
Margaret Mcguan
Jonathan and Susan Wittwer
Sara Young
Norman Milstein and Katherine Clark
Susana Miller
Timothy Miller
Jill and Chad Misunas
Katharyne Mitchell and Matthew Sparke
Aggie Morrow
Bryan Mori
Katie and Forest Monsen
Carla Bomholdt Moss
Daniel Ness
Barbara Ness
Veronica Ness
Teresa and Dick Norris
Elena Pacheco
David Pacini
The Peattie Family Trust
Sarah Rabkin and Charles Atkinson
Kyla Roessler
Susan Sanford and Stephen McMillan
Paula Schneider
Susan Shane
Carol Shennan
Amanda Shuman
Parke and Claire Snavely
Gal Steinert
Ruth Stiles
Lesley and Erik Svenson
Paul Sweeney and Joann Deutch
Lee and Lincoln Taiz
Jessica Tarnoff
Bruce Thompson
Kevin Thompson
Cheryl Thruber
Kaitlin Trataris
Catherine Trejo
Steven Trudell
Maria Fernanda Valeria Viveros Martinez
Jerry and Robynn Walters
Dan and Karen Warrick
Kevin Wasbauer
Jesse Weinstock
Dorris Welch
Trevlyn Williams
Vaughn Williams
Debra Wirkman