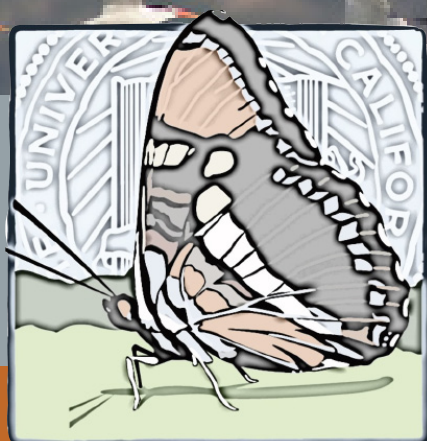


UC CALIFORNIA NATURALIST PROGRAM



Explore nature. Build community. Take action.

1st Statewide Conference • Asilomar, Pacific Grove, CA • Oct 17-19, 2014

2014 CONFERENCE PROGRAM

University of California
Agriculture and Natural Resources



ABOUT THE UC CALIFORNIA NATURALIST PROGRAM

Launched in 2012 through the University of California Cooperative Extension, the California Naturalist Program is designed to introduce the public, teachers, interpreters, docents, green collar workers, natural resource managers, and budding scientists to the wonders of our unique ecology and engage these individuals in the stewardship of California's natural communities. Coinciding with our first statewide conference, this year University of California, Agriculture and Natural Resources celebrates 100 years of UC Cooperative Extension researchers and educators living and working in communities to solve economic, agricultural, natural resource, youth development, and nutrition issues.

In two years, the California Naturalist Program has trained over 650 naturalists who have in turn volunteered over 18,000 hours of service. We are currently partnering with 21 organizations, and five times as many informal science and natural resource management organizations have expressed interest in participating. Current program partners include American River Conservancy, American River Natural History Association and Effie Yeaw Nature Center, Central Sierras Cooperative Extension, Jepson Herbarium at UC Berkeley, Occidental Arts & Ecology Center, Pacific Grove Museum of Natural History, Pasadena City College, Point Reyes National Seashore Association, Riverside Metropolitan Museum, San Diego Cooperative Extension, Salmon Protection and Watershed Network, Santa Barbara Botanic Garden and Sedgwick Reserve, Santa Rosa Junior College, Sierra Foothills Conservancy, Sierra Streams Institute, Stewards of the Coast and Redwoods, Tejon Ranch Conservancy, UC Berkeley Sagehen Field Station, UC Hopland Research & Extension Center, and UC Santa Cruz Arboretum (see pages 6-9 for partner organization descriptions). Rapid growth and overwhelming program support demonstrate an incredible need that the California Naturalist Program is addressing.

The California Naturalist Program plays an essential role in California's future by fostering a new era of citizen involvement in environmental science, management, and policy. We strive to break down barriers that many young and culturally diverse people face in accessing environmental education and workforce training opportunities by collaborating with institutions that work with diverse communities. Your participation in this network and inaugural conference is an unprecedented opportunity to foster a community of practice that will live on to steward California's ecosystems into the future.



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WELCOME FROM THE CALIFORNIA NATURALIST PROGRAM



UC California Naturalist Program

4070 University Road
Hopland, CA 95449
707.744.1424 x104 office
canaturalist@ucanr.edu
<http://calnat.ucanr.edu/>

October 6, 2014

On behalf of the California Naturalist conference organizing committee, I am pleased to welcome you to the very first California Naturalist Statewide Conference. There have been many firsts for CalNat: first course, first published curriculum, first trainer's workshop, first like on facebook, and of course, first graduates, and we are grateful to all the early adopters who have embraced the California Naturalist Program –including you! It's amazing to see the seeds we planted growing into a real community.

We started planning for this conference in the summer of 2013 and the entire process has been a marvelous collaboration among the entire conference planning committee (see page 4). Our circle of volunteers and sponsors grew with time and all deserve our thanks. Along with UC ANR's program support unit, we all worked hard on the many important details that make up this special event.

The mission of the California Naturalist Program is to foster a diverse community of naturalists and promote stewardship of California's natural resources through education and service. This is made possible by partnerships between UC Agriculture and Natural Resources and environmental science and stewardship institutions across California. This network allows stewards to share an identity and be part of a larger community, as well as provides new opportunities for life-long learning.

It's a thrill to convene with all of you here at Asilomar to celebrate the successful launch of the UC California Naturalist, California State Park's 150th birthday, and 100 years of UC Cooperative Extension! Together we can build connections and plan future activities that will benefit our efforts at discovery, action, and stewardship on behalf of nature. Let us all value this opportunity to meet in this beautiful near shore environment and tell our stories, learn from others, and set future collaborations in motion. We hope everyone has a wonderful shared experience at the 1st California Naturalist Conference, forges lasting friendships, and will plan to reunite in two years' time.

Sincerely,

Adina Merenlender, Conference Planning Committee Chair & Co-Director

Sabrina Drill, Co-Director



WELCOME FROM PACIFIC GROVE MUSEUM OF NATURAL HISTORY



TO INSPIRE DISCOVERY, WONDER, AND
STEWARDSHIP OF OUR NATURAL WORLD

October 6, 2014

On behalf of the Pacific Grove Museum of Natural History, I am happy to welcome you to the Central Coast for the inaugural California Naturalist Conference. From Ed Ricketts studying the tidepools as a 'novice' to the birth of the Chautauqua nature study movement in Pacific Grove, the Monterey Bay has been a wonderful inspiration to naturalists and artists alike and I can't think of a better location to meet and experience our natural world.

As a California Naturalist instructor, it has been exciting to watch this program blossom from a handful of programs into the thriving (and still growing) program that it is today. The PG Museum of Natural History now has 76 certified naturalists and the community that has been built with those shared experiences has been wonderful and a great connector between local environmental organizations. These connections have fostered new volunteer opportunities and organizational partnerships that may not have happened otherwise. As for me, I have learned so much from the people taking the class and I enjoy watching participants learn from each other. The learning community that is built within each naturalist group is unique, inspiring and keeps class exciting with what we may learn next from the collective knowledge of the group.

Welcome, again, to the Central Coast! I hope that over the course of this weekend you enjoy the amazing information shared, the pleasure of the company of your peers and breathtaking natural environment.

Best,

Ann Wasser
Education Manager
Pacific Grove Museum of Natural History

165 Forest Avenue
Pacific Grove CA 93950-2612
Phone 831.648.5716
Fax 831.648.5755
www.pgmuseum.org



2014 CONFERENCE PLANNING COMMITTEE

Name	Affiliation	Role
Janice Alexander	UCCE Marin	Trainings chair
Carol Blaney	Interpretive specialist	Scholarship committee
Sherry Cooper	UC ANR Program Support Unit	Operations
Sabrina Drill	UCCE Los Angeles/Ventura & CalNat Co-Director	Southern CA liaison
Melissa Eitzel	Graduate Student, UC Berkeley CNR ESPM	Scholarship committee
Angela Evenden	Pacific West Region, National Park Service	Park connections
Lisa Fischer	UC ANR REC Director	Sponsors chair
Brook Gamble	CalNat Community Education Specialist	Member
Susie Kocher	UCCE Central Sierra	Member
Lauren McNees	UC ANR Program Support Unit	Operations
Adina Merenlender	CalNat Co-Director	Program chair
Donna Pozzi	Chief, Interpretation & Education Division, CA State Parks	Park connections
Carrie Raleigh	CalNat Community Education Specialist	Silent auction chair
Mike Roa	Educator	Scholarship committee
Deborah Stanger Edelman	CalNat Instructor	Poster session chair
Jeannette Warnert	UC ANR Communications Services	Marketing
Ann Wasser	Pacific Grove Museum of Natural History	Local chair & field trip chair
Ed Wong	California Air Resources Board / CEEIN	Member



CONFERENCE SPONSORS

We thank the California Naturalist Conference sponsors who made it possible for our growing community to convene for the first time. Their generosity also allowed us to award 30 conference scholarships to Naturalists!

<p>CALIFORNIA TIGER SALAMANDER</p>	<div data-bbox="354 598 722 814">  Save The Redwoods </div> <div data-bbox="852 598 1347 829">  East Bay Regional Park District </div> <div data-bbox="495 871 1096 987">  </div>
<p>BAY CHECKERSPOT BUTTERFLY</p>	<div data-bbox="446 1113 803 1249">  The Nature Conservancy Protecting nature. Preserving life.® </div> <div data-bbox="885 1060 1226 1249">  Lindsay Wildlife Museum </div> <div data-bbox="324 1291 641 1417">  ANONYMOUS DONOR </div> <div data-bbox="755 1270 974 1428">  </div> <div data-bbox="982 1270 1128 1428">  </div> <div data-bbox="1136 1291 1372 1417">  </div>
<p>OHLONE TIGER BEETLE</p>	<div data-bbox="308 1501 641 1732">  ACORN NATURALISTS® </div> <div data-bbox="738 1480 1096 1585">  SILICON VALLEY community foundation® </div> <div data-bbox="657 1606 990 1722">  CALIFORNIA STATE PARKS FOUNDATION </div> <div data-bbox="1128 1501 1404 1711">  California Wildlife Foundation/ California Oaks </div> <div data-bbox="397 1753 738 1879">  ROBERT & PATRICIA SWITZER FOUNDATION </div> <div data-bbox="950 1743 1307 1879">  SCHOLARSHIP IN MEMORY OF RUTH ESTHER DURHAM </div>



CALIFORNIA NATURALIST PROGRAM PARTNERS

AMERICAN RIVER CONSERVANCY



The **American River Conservancy** serves our communities by ensuring healthy ecosystems within the Upper American and upper Cosumnes River Watersheds through land conservation, stewardship and education. www.arconservancy.org/



The **American River Natural History Association** and the **Effie Yeaw Nature Center** are dedicated to bringing awareness of the beauty and diversity of the natural world to children, families, and the community through education initiatives that foster appreciation, enjoyment, and stewardship of the unique natural and cultural resources of the Sacramento region. www.arnha.org/



The mission of the **Jepson Herbarium at UC Berkeley** is to understand and conserve the California flora through systematic, floristic, and conservation biology studies and to communicate knowledge of the flora through publications and instructional programs. <http://ucjeps.berkeley.edu/jeps/>



The **Occidental Arts and Ecology Center** is a non-profit education center in Northern California's Sonoma County. Our work revolves around restoring and advocating for biological and cultural diversity. We research and demonstrate regionally-based sustainability, and empower whole communities to transition towards ecological and social resilience. <http://oaec.org/>



Pacific Grove Museum of Natural History's mission is to inspire discovery, wonder, and stewardship of our natural world. The Museum is a living field guide of the California Central Coast. www.pgmuseum.org/

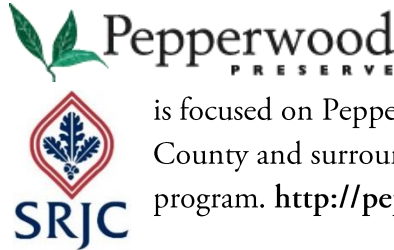


Pasadena Naturalist

The California Naturalist Program at **Pasadena City College** invites certification as part of the Field Biology curriculum. Students discover the dynamic southern California environs, engage in local stewardship challenges, and become an active member of a growing base of citizen scientists and volunteers. www.pasadena.edu/



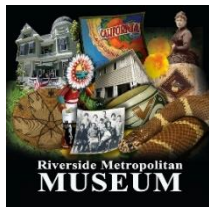
CALIFORNIA NATURALIST PROGRAM PARTNERS (CONTINUED)



Pepperwood Preserve Santa Rosa Junior College and Pepperwood Preserve jointly offer the California Naturalist Program. While the field component is focused on Pepperwood Preserve, the content applies to the natural history of Sonoma County and surrounds and is a component of the Pepperwood Preserve Steward training program. <http://pepperwoodpreserve.org> and www.santarosa.edu/



Point Reyes National Seashore Association is a cooperating association of the National Park Service. We work in partnership with Point Reyes National Seashore and the public to preserve, restore and maintain wildlife habitat, trails, and historic sites in our beautiful coastal park. Our year-round environmental education programs help children and adults deepen their understanding of nature and inspire the next generation of park stewards. www.ptreyes.org/



The **Riverside Metropolitan Museum** is a center for learning and a community museum that collects, exhibits, and interprets cultural and natural history. In a rapidly changing community, the museum provides an understanding and appreciation of our region's legacy. www.riversideca.gov/museum/



Santa Barbara Botanic Garden and Sedgwick Reserve (University of California Natural Reserve System) partner to offer the California Naturalist certification course. This course provides the foundational curriculum to become a Santa Barbara Botanic Garden or UCSB Natural Reserve docent. www.sbbg.org and <http://sedgwick.nrs.ucsb.edu/>

SIERRA-FOOTHILL



· CONSERVANCY ·

The grasslands, foothills, and forests between Yosemite and Kings Canyon National Parks provide land for farms and ranches, a home for native plants and wildlife, and a source of clean water. **The Sierra Foothill Conservancy** honors our natural and cultural heritage by protecting these resources and ensuring that present and future generations will continue to experience and enjoy the land in this region. www.sierrafoothill.org/



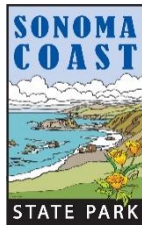
CALIFORNIA NATURALIST PROGRAM PARTNERS (CONTINUED)



Sierra Streams Institute promotes community stewardship and advances scientific knowledge of watersheds through monitoring, research, restoration and education, for the benefit of the entire Sierra Nevada region and beyond. www.sierrastreams.org/



The **Salmon Protection and Watershed Network** is a project of the **Turtle Island Restoration Network**. Turtle Island and its suite of marine restoration programs work to protect endangered marine species, save critical ecosystems, improve consumer choices, encourage government action and inspire corporate responsibility. <https://seaturtles.org/programs/salmon/>



Stewards of the Coast and Redwoods promotes education, preservation and restoration of the natural and cultural resources of Russian River area State Parks through interpretation and public stewardship. Park visitors of all ages are provided with a variety of programs and opportunities to experience and explore these exceptional parks. www.stewardscr.org/



Located at the intersection of four ecological regions and between large tracts of public and private conservation land, the **Tejon Ranch Conservancy** is key to sustaining California's biodiversity. By developing state-of-the-art conservation science and land management principles on this working ranch, the Conservancy will lead the way in understanding and protecting the exceptional biodiversity, ecosystems, and movement of wildlife throughout this vast region. www.tejonconservancy.org/



UC Hopland Research & Extension Center is a research and education facility in California's north coast region whose mission is to use science to find better ways to manage natural resources and conduct sustainable agricultural practices, for the benefit of California's citizens. They offer the California Naturalist Program in partnership with UC Cooperative Extension Mendocino County. <http://hrec.ucanr.edu/>



CALIFORNIA NATURALIST PROGRAM PARTNERS (CONTINUED)



Sagehen Creek Field Station and the Sagehen Experimental Forest are research and teaching facilities of the University of California at Berkeley, the Berkeley Natural History Museums and the UC Natural Reserve System. Sagehen serves as the hub of a broader network of regional research areas known as the Central Sierra Field Research Stations. <http://sagehen.ucnrs.org/>



UC ANR Academic Advisors statewide are key leaders in guiding and developing the California Naturalist Program in their counties through **UC Cooperative Extension** and other valuable community partnerships. In late 2014, successful Renewable Resources Extension Act (RREA) grants have allowed new California Naturalist Programs to begin developing in multiple counties include Calaveras, Madera, Mariposa, Merced, Plumas, San Diego, and Tuolumne. <http://ucanr.edu/>



The UC Santa Cruz Arboretum is a research and teaching facility committed to plant conservation and serves both the campus and the public. Its rich and diverse collection provides beginning students with a broad survey of the plant kingdom. <http://arboretum.ucsc.edu/>



ECO- CONSCIOUS CONFERENCE

Conference Venue



Asilomar Conference Center, managed by Aramark, has a proactive “Green Thread” program. Promising “a green thread in everything we do,” the Green Thread program is an environmental management system designed to reduce the Conference Center’s environmental footprint while delivering exceptional operational results. Throughout the corporation, Aramark develops and implements long-term environmental stewardship programs and policies

within the areas of sustainable food, responsible procurement, green buildings, energy and water conservation, transportation, and waste stream management. The Green Thread Program was designed to prepare Asilomar Conference Center for a special environmental management certification, the ISO 14001 certification.

California Naturalist Conference Products

The California Naturalist Conference Planning Committee deliberately chose not to provide multiple registration gifts that might be unwanted or end up in landfills. Instead we offer the following to lessen our impact. We welcome your ongoing suggestions on this year’s choices and suggestions for the 2016 meeting.

- We are not producing a printed abstract book of poster abstracts or giving away flash drives- you can find PDF booklets online: <http://calnat.ucanr.edu/2014Conference/>.
- Planning Committee member Mike Roa generously (and skillfully!) volunteered to cut over 200 “tree cookie” name badges. After consulting multiple Sudden Oak Death experts, Mike baked the tree cookies at high heat, eliminating any possibility of introducing plant pathogens to a new area. We are thrilled to reduce some of the usual conference plastic and provide you with a unique memento of the conference. Learn more about the risks of transporting wood here: www.dontmovefirewood.org/
- New ring spun organic cotton California Naturalist Program tee shirts are available for purchase in a variety of women, men, and children’s sizes at the conference (and soon online, too, though a new partnership with Acorn Naturalists!). Ring spun cotton tends to be softer and more durable than other cotton fiber techniques. We chose organic cotton because the conventionally grown crop disproportionately accounts for the use of 10-16% of the world's pesticides, herbicides, insecticides, and defoliants. Organic cotton is grown using methods and materials that have a lower impact on the environment therefore maintaining soil fertility, reducing the use of pesticides and fertilizers, and fostering more biologically diverse agriculture.
- Celebrate the success of the landmark California plastic bag ban with us and purchase a new reusable California Naturalist Program rePETe ChicoBag. Bags are made from 100% post-consumer recycled plastic bottles. A materials statement listing each component used in production is printed on each bag’s pouch. ChicoBag’s mission is to help humanity bag the single use habit. We’re on board!



DINING

If you are staying at Asilomar Friday and Saturday nights, all meals, including Friday dinner, Saturday breakfast, lunch and dinner, Sunday breakfast and lunch, and coffee breaks during your stay are included your registration. *If you are not staying at Asilomar*, Saturday lunch, dinner, and coffee breaks are included in your registration. Crocker Dining Hall offers incomparable views of the forest and the dunes of Asilomar State Beach. The daily menu highlights fresh, seasonal, local produce procured directly from regional, organic farmers. Vegetarian, vegan, and more options are available on request. For an alternative to the dining room, Phoebe's Café is located in Phoebe Apperson Hearst Social Hall. The Café's hours are 6:30 AM to 9:00 PM. Sunday through Thursday and 6:30 AM to 10:00 PM on Friday and Saturday.

Breakfast: Served Daily: 7:30 AM - 9:00 AM

Lunch: Served Daily: 12:00 PM - 1:00 PM

Dinner: Served Daily: 6:00 PM - 7:00 PM (Saturday night's dinner will be provided in the Poster Reception)

Snacks and drinks will be provided for all morning and afternoon participants in Friday's advanced trainings. Box lunches will be provided for all Sunday field trip participants *staying at Asilomar*. For participants lodging elsewhere, you will receive a box lunch if you purchased it with registration or you may bring your own. There is a full service cafeteria at the Monterey Bay Aquarium, but no food purchasing options on the Elkhorn Slough, Fort Ord, or Point Lobos field trips.

THERE ARE TIMES WHEN DISAPPEARING
INTO THE WILDERNESS IS THE PERFECT
WAY TO FIND YOURSELF.



Save The Redwoods

L E A G U E®

SaveTheRedwoods.org

SCHEDULE OVERVIEW


Friday October 17		Saturday October 18			Sunday October 19
		<u>People, Parks & Diversity (Chapel)</u>	<u>Global Change & Bioiversity (Heather)</u>		
	8:30 AM	Engaging with nature and interpretation	Streams and fresh water management	8:30 AM	Field trips (box lunch)
	9:00 AM			9:00 AM	
	9:30 AM			9:30 AM	
9:30-4 Advanced Trainings; 2:30-4:30 Registration (Chapel)	10:00 AM	Break		10:00 AM	
	10:30 AM	Coupling Science and Art	Ecological restoration and invasive species	10:30 AM	
	11:00 AM			11:00 AM	
	11:30 AM			11:30 AM	
	12:00 PM			Lunch	
	1:00 PM	Plenary Session (Chapel)		1:00 PM	
	2:15 PM			2:15 PM	
	2:30 PM	Marine conservation	Disturbance ecology	2:30 PM	
	3:00 PM			3:00 PM	
	3:30 PM			3:30 PM	
	4:00 PM	Break		4:00 PM	
Opening Ceremony (Chapel)	4:30 PM	Traditional Ecological Knowledge and Historical Ecology	Species response to climate change	4:30 PM	
	5:00 PM			5:00 PM	
	5:30 PM			5:30 PM	
	6:00 PM			6:00 PM	
Instructors Dinner (Surf & Sand)	6:30 PM	Poster Session & Dinner Reception Silent Auction & Natural History Book Corner (Nautilus and Triton)		6:30 PM	
	7:00 PM			7:00 PM	
	7:30 PM			7:30 PM	
	8:00 PM			8:00 PM	
	8:30 PM			8:30 PM	



FRIDAY ADVANCED TRAININGS

Conference events begin Friday, October 17 with advanced training opportunities.

1. **Writing as a Natural History Learning Tool.** Instructor: Sarah Rabkin. (*Meets at Asilomar*)
 Time: 9:30am-12:30pm. In the hands of a naturalist, outdoor writing can be a powerful tool for discovery and a conduit to a more resonant relationship with the larger-than-human world. In this session, we will write to cultivate powers of close observation, vivid description, and enhanced perception.
2. **Advanced field notebook skills.** Instructor: Russell & Sarah DiFiori. (*Meets at Asilomar*)
 Time: 9:30am-12:30pm. This course promises to bring field observation to life and diversify the ways you can document your experiences in nature and increase your understanding of life on earth.
3. **Drawing Birds.** Instructor: John Muir Laws. (*Meets at Pacific Grove Museum of Natural History*)
 Time: 9:30am-12:30pm. This bird sketching workshop will give you the tools you need to draw birds on the move. No previous drawing experience necessary.
4. **Intriguing Ways to Explore the Intertidal Zone.** Instructor: Steven Cochrane. (*Meets at Asilomar*)
 Time: 1pm-4pm. This training will advance your understanding of intertidal ecology and reveal intertidal activities suitable to share with all ages.
5. **Global Position System (GPS) & Mobile Field Data Collection.**
 Instructor: Sean Hogan. (*Meets at Asilomar*) Time: 1pm-4pm. This workshop offers hands-on training using hand-held GPS receivers and other mobile technologies and is designed for participants with little to no experience. You will learn all about what GPS is and how it works.
6. **Nature Drawing.**
 Instructor: John Muir Laws. (*Meets at Pacific Grove Museum of Natural History*) Time: 1-4pm. Learn tricks and techniques to help you include sketches, diagrams, and drawings in your field notebook.



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Urban & Community Forestry



FRIDAY WELCOME CEREMONY

4:30-6:00 Friday, October 17; Chapel. Please attend dressed as your favorite organism! Whatever that means to you: arrive in full costume, face paint, wings, favorite critter jewelry, a fun shirt, hat, festive socks...

4:30-4:40 Welcome to the first California Naturalist Conference!

Adina Merenlender & Sabrina Drill, California Naturalist Program Chair & Co-Directors; **Donna Pozzi**, California State Parks Chief of Interpretation and Education

4:40-5:10 The Rebirth of Natural History; Live guitar music and slides

Lori Mannel, Pacific Grove Museum of Natural History Executive Director

5:10-5:30 Making a difference for the coast and its inhabitants

Mark Stone, California State Assembly (29th district)

5:30-5:50 Marine conservation

Bill Douros, West Coast Regional Director, NOAA Office of National Marine Sanctuaries

5:50-6:00 Living at the Edge of the World: California's First Naturalists

Linda Yamane, Rumsien Ohlone from Monterey



**A GIFT FROM THE PEOPLE
TO THE PEOPLE**

The Nature Conservancy



Protecting nature. Preserving life.®

SATURDAY PLENARY SPEAKERS



Citizen Scientist:

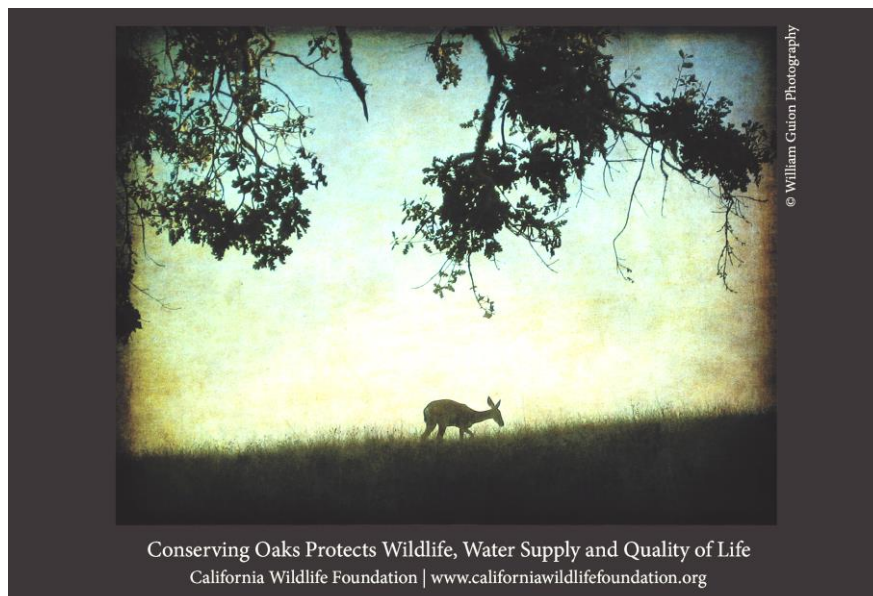
Adventures in the Anthropocene

Author **Mary Ellen Hannibal**'s recent book *The Spine of the Continent* (2012) chronicles the birth of conservation biology and the monumental effort made by environmental organizations and everyday citizens to create a wildlife corridor from the Yukon to Mexico. She will talk about *The Spine*, which examines the concept of biodiversity and what is working to save it, as well as research for her next book, *Citizen Scientist*. Hannibal is a winner of the National Association of Science Writers Science and Society Award and Stanford's Knight Risser Prize in Western Environmental Journalism.



Dodging Extinction

Anthony D. Barnosky is a Professor of Integrative Biology at UC Berkeley and Curator of Fossil Mammals in the Museum of Paleontology. Author of numerous scientific publications, op eds, and blog posts, he is a paleobiologist who studies the evolution and extinction of species and how climate change and other disturbances impact earth's ecosystems. His book *Heatstroke: Nature in the Age of Global Warming* (2009) highlights what today's changing climate means for practicing conservation biology in the coming decades. His new book is titled "Dodging Extinction-Power, Food, Money, and the Future of Life on Earth"





SATURDAY: GLOBAL CHANGE & BIODIVERSITY TRACK

Saturday, October 18, 8:30AM-6PM; Heather Room

<p>8:30-10:00</p> <p>Streams and fresh water management</p>	<p>Dr. Lisa Micheli, Pepperwood Preserve Where does the rain go? Towards an integrated hydrologic monitoring strategy.</p> <p>Jennifer Carah, The Nature Conservancy RiverSmart Vineyards: Enhanced flows for salmonids, water security for agriculture</p> <p>Dr. Sasha Gennet, The Nature Conservancy Moving toward a watershed management approach for the Salinas River: Farms, Fish, and the Flyway</p>
<p>10:30-12:00</p> <p>Ecological restoration and invasive species</p>	<p>Dr. Edith Allen, UC Riverside Invasive species and restoration of California grasslands and shrublands</p> <p>Dr. Edwin Grosholz, UC Davis Balancing biological invasions and habitat restoration in coastal ecosystems</p> <p>Dr. Juliana Gonzalez, The Watershed Project Bay Area A Community of Stewards</p>
<p>2:30-4:00</p> <p>Disturbance ecology</p>	<p>Dr. Max Moritz, UC Berkeley Fire and California Naturalists</p> <p>Dr. Ryan DeSantis, UC Coop. Extension Disturbance effects on xeric oak forests</p> <p>Bruce Delgado Maritime chaparral recovery after fire and habitat restoration</p>
<p>4:30-6:00</p> <p>Species response to climate change</p>	<p>Dr. Sam Veloz, Point Blue Preparing for ecological surprises: Climate smart conservation</p> <p>Dr. Emily Burns, Save the Redwoods League Citizen Science and the Redwood Forest</p> <p>Dr. Stu Weiss, Creekside Center for Earth Observation Up, down and sideways: Species responses to warming in the White Mountains, CA</p>



SATURDAY: PEOPLE, PARKS & DIVERSITY TRACK

Saturday, October 18, 8:30AM-6PM; Chapel

8:30-10:00	Engaging with nature and interpretation	Ken-ichi Ueda, iNaturalist, Cal Academy of Sciences	iNaturalist: new developments for naturalists
		Elizabeth Hammack, State Parks	Engaging your audience through interpretive communication
10:30-12:00	Coupling Science and Art	John Muir Laws, Nature writer & artist	Exploring nature, art, and stewardship
		Dr. Nicholas Bauch, Spatial History Project, Stanford	Artistic-Geographical Practice: Bridging science and art with digital publishing
		Fiona Maclean	Learning the Art of Science Communication Through Animation
2:30-4:00	Marine conservation	Ann Wasser, Pacific Grove Museum of Natural History	LIMPETS: A powerful citizen science network for intertidal monitoring
		Dr. Mark Carr, Long Marine Lab, UCSC	Next Generation Naturalists and California's Network of Marine Protected Areas
		Dr. Chris Pincetich, Instructor California Naturalist Program	Citizen Science and Naturalist Contributions Can Protect California Current Marine Life
4:30-6:00	Traditional Ecological Knowledge & Historical Ecology	Chuck Striplen (Amah Mutsun), San Francisco Estuary Institute	Bringing TEK into a Science-based Planning Framework
		Erin Beller, San Francisco Estuary Institute	Contributions of Historical Ecology to Landscape Level Planning and Restoration in California
		Sage LaPena (Nomtipom Wintu), Ethnobotanist	Traditional Ecological Knowledge and today's naturalists



GLOBAL CHANGE & BIODIVERSITY TRACK: SPEAKER BIOGRAPHIES

Dr. **Edie Allen** received her Ph.D. from the University of Wyoming. Her areas of research are restoration ecology, soil ecology, and invasive species ecology, and she has worked in forests, shrublands, grasslands, and deserts, including sites disturbed by agriculture, mining, anthropogenic nitrogen deposition, and frequent fire.

Dr. **Emily Burns** is the science director for Save the Redwoods League. She uses citizen science to engage the public in a dialogue about climate change. The resulting crowd-source data helps the League track the impact of climate change on the redwood forest floor.

Jennifer Carah is an Ecologist for The Nature Conservancy, and has successfully managed numerous salmon habitat restoration and monitoring projects on the North Coast of California, and is currently deeply engaged in work to protect critical stream flows for salmon.

Bruce Delgado works on Fort Ord as a botanist and natural land manager for the Bureau of Land Management. He has a deep understanding of Fort Ord's issues and challenges. Mayor of Marina has experience with a diverse array of local environmental and social issues.

Dr. **Ryan DeSantis** earned BS in Forestry from University of New Hampshire, MS in Ecology from Michigan Technological University, and PhD in Natural Resource Ecology & Management from Oklahoma State University. He served as US Peace Corps ecological volunteer in Bulgaria and worked on fire crews in Massachusetts and Wyoming. He completed postdoc as threats analyst for Northern Forest Futures Project with US Forest Service Northern Research Station.

Dr. **Juliana Gonzalez** has been instrumental in engaging over 3,500 volunteers per year to help steward the creeks and shorelines of the San Francisco Bay. As Healthy Watersheds Program Manager she is responsible for empowering communities to keep our watersheds free of pollutants specially trash that can become marine debris. As Deputy Director she helps small friends of creeks get established and provides them support for long term sustainability.

Dr. **Sasha Gennet** addresses critical conservation issues such as climate change, wildland fire, and sustainable ranching and farming through science, spatial planning, policy, and land protection strategies. Since she joined the California Chapter in 2007, she has been the lead biologist and planner for the Mount Hamilton and Monterey Projects.

Dr. **Edwin Grosholz** has been studying invasions in coastal ecosystems for the past 20 years. His work also involves restoration of native oysters and salt marshes in San Francisco Bay. He also manages an extension education program that addresse issues associated with invasive species and habitat restoration.

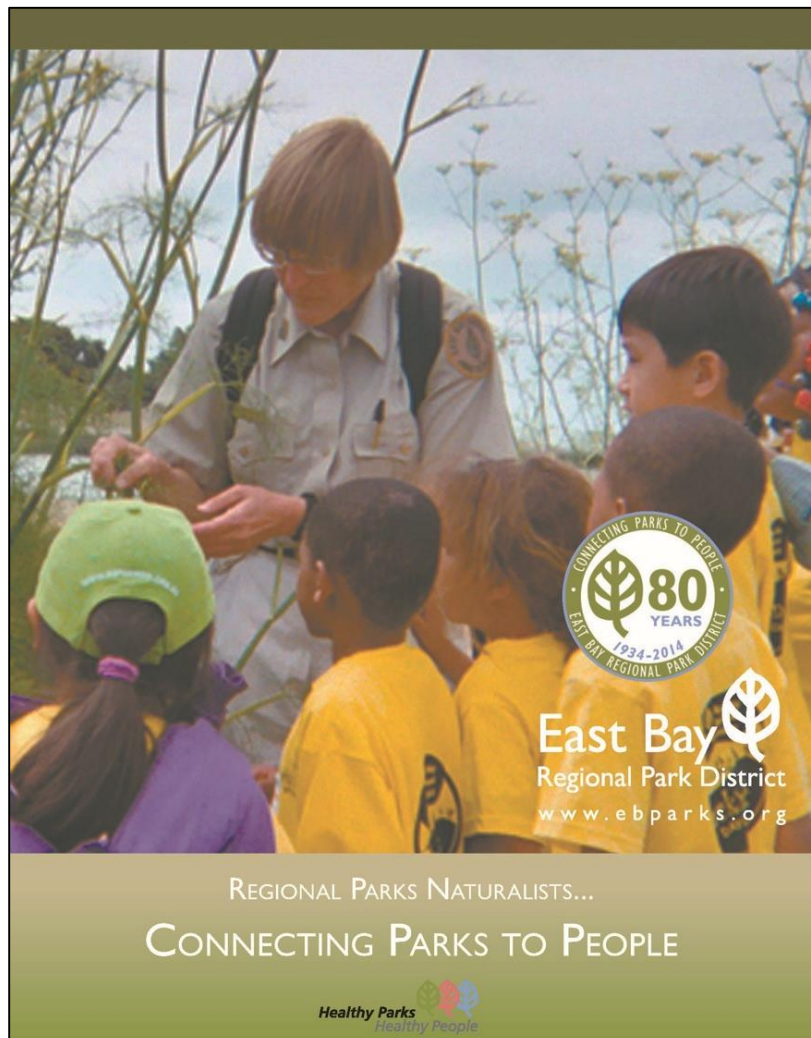
GLOBAL CHANGE & BIODIVERSITY TRACK: SPEAKER BIOGRAPHIES CONTINUED

Dr. **Lisa Michelli** is the founding director of the Dwight Center for Conservation Science at Pepperwood. She is trained as a hydrologist/geomorphologist and enjoys collaborating with ecologists on restoration and planning initiatives, particularly around the topic of how to make our natural resources more resilient to climate change. She enjoys engaging Cal Naturalists in citizen science projects at Pepperwood!

Dr. **Max Moritz** studies natural controls on fire regimes, how humans interact with them, and effects of climate change. Max's background is in disturbance ecology and biogeography, with an emphasis on spatial analysis and modeling.

Dr. **Sam Veloz** is a scientist with Point Blue and his research program is focused on predicting and understanding the impacts of environmental change on biodiversity. His research is designed to inform climate adaptation decision making.

Dr. **Stu Weiss** is a conservation ecologist using advanced quantitative techniques to address climate change, nitrogen deposition, habitat management and restoration, and conservation planning in California and the Western North America.





PEOPLE, PARKS & DIVERSITY TRACK: SPEAKER BIOGRAPHIES

Dr. **Mark Carr** is a professor of marine ecology at UC Santa Cruz. He was the Co-chair of the Science Advisory Team to the Marine Life Protection Act Initiative and is now the co-chair of the Science Advisory Team to the California Ocean Protection Council. He is an Aldo Leopold Leadership Program fellow.

Dr. **Nicholas Bauch** is a geographer at the Stanford Center for Spatial and Textual Analysis. He focuses on the philosophy of nature and space with work that interprets the landscapes we live in from a humanistic perspective. The goal is to enchant the world through geography as an interpretive tool.

Elizabeth Hammack is a State Park interpreter III and has worked in the field of interpretation for 31 years. She taught interpretation for 16 years at West Valley College and now teaches at San Jose State University. She has worked for California State Parks, National Parks, US Forest Service and County and City Parks.

Sage LaPena has been applying the knowledge of Traditional Ecology and land management for over 25 years based on a lifetime of experience in the field that began as a child collecting medicine and basket materials, first as an apprentice and later as an herbal practitioner and weaver.

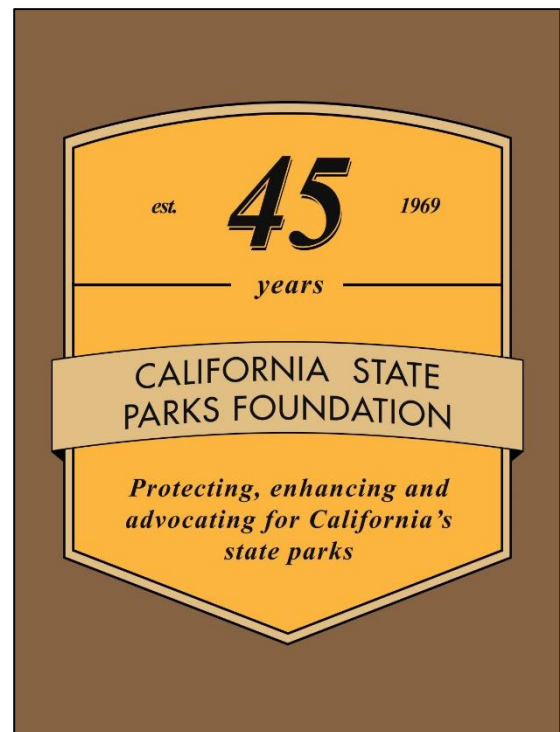
Fiona Lee MacLean is an instructor at a residential outdoor-ed program and a freelance illustrator/ animator. She is a graduate of the CSUMB Science Illustration program. Her goal is to use the art of animation to help tell the complex stories of scientists' research.

John (Jack) Muir Laws is a naturalist, educator and artist and is in love with the natural world and has lived his life sharing this passion with others. He is trained as a wildlife biologist and is a Research Associate of the California Academy of Sciences. Jack has taught nature education since 1984 in California, Wyoming, and Alaska.

Ken-ichi Ueda is the founder and developer of iNaturalist, an online social network for sharing nature. He is an expert in web development, information visualization, interface design, and the intersection of biology and information to connect people to nature through technology.

Dr. Chris Pincetich is a marine biologist, citizen science director, and professional naturalist focused on protecting the marine life in the California Current and Eastern Pacific Ocean. His current research focuses on determining the extent of marine debris and plastic pollution in Marin County.

Chuck Striplen manages SFEI's Cultural Landscapes focus area, working with tribal local, and state government to help bridge scientific and traditional knowledge systems.





SATURDAY POSTER RECEPTION

Saturday, October 18, 6:30-8:30PM Nautilus and Triton Rooms

The Saturday night reception provides a forum for poster authors and attendees to discuss their projects and programs at length. California Naturalists, partners, and other relevant organizations will present posters on topics and activities related to California's natural history, conservation, citizen science and stewardship, or California Naturalist Program activities specifically. Dinner is provided at the Poster Reception for all participants. A map to assist finding posters/presenters will be provided at the reception. Full abstracts, co-authors, topical areas, and best poster awardees will be available on-line after the conference.

POSTER TITLE, PRIMARY AUTHOR (LAST, FIRST), ORGANIZATION

Teaching Naturally: Exploring a California Naturalist Program for Teachers. **Adden, Birit**, Children's Discovery Museum of San Jose.

A Manual and Guide for a Docent-Led Nature Walk through the natural habitats of Anderson Marsh State Historic Park. **Bornstein, Henry**, Anderson Marsh Interpretive Association.

Using Coverboards and Citizen Scientists to Determine Herpetofauna Distributions along Moisture Gradients. **Byrne, Julie**, Sonoma State University & Pepperwood Preserve.

Enhancing Community Awareness of Wildfire Danger: Using Live Fuel Moisture Data Collected by Citizen Science Volunteers. **Castaneda, Kathy**, Santa Barbara Botanic Garden.

Wildlife movement in Coyote Valley: a study to assist in the enhancement and preservation of a critical wildlife corridor. **Chiarappa-Zucca, Marina**, De Anza Community College.

Working with our partners we provide innovative interpretation at Point Lobos State Natural Reserve. **Clark-Gray, Patricia**, California State Parks.

Protecting America's Biggest Cat - Mountain Lions and Human Interaction & Conflict. **Claxton, Kathleen Susie**.

3 Ways to Become a Salmon Warrior. **Clune, Catie**, Turtle Island Restoration Network.

Planning for Volunteer Placement Following Completion of the CA Naturalist Program: Piloting an Informal Needs Assessment. **Crumley, Diane**, Solano County Resource Conservation District.

California Project Learning Tree. **Derby, Sandra**, UCCE/ Project Learning Tree.

Citizen Science at Hirschman's Pond. **Durben, Rachel**, Sierra Streams Institute.

Docent Program Development at the University of California's Landels-Hill Big Creek Reserve. **Evans, Elizabeth**.



POSTER TITLE, PRIMARY AUTHOR (LAST, FIRST), ORGANIZATION (CONTINUED)

Geographic Distribution of Tree Squirrels in California - A Citizen Science Approach To Gathering Data. **Garcia, Rosemary**, California State University, Los Angeles.

Pinnacles National Park – A Haven for California Naturalists. **Johnson, Paul**, National Park Service.

Community Health Impacts from Mining Exposure. **Keeble-Toll, Alexandria**, Sierra Streams Institute.

A Model For Undergraduate Naturalist Training: Lessons From 40+ Years of UCSC's Natural History Field Quarter Class. **Lay, Chris**, University of California, Santa Cruz.

Surveying California's southernmost pronghorn population, Tejon Ranch, Antelope Valley, California **Lydecker, Bill**, Tejon Ranch Conservancy.

Vegetation Mapping of a Watershed Powered By Citizen Science. **Lynch, Eve**.

Secrets of the Oak Woodlands: Plants and Animals among California's Oaks. **Marianchild, Kate**. Heyday Publishers (See Kate's book at the Natural History Book Corner, too).

One Fish, Two Fish, Coho? Go Fish! **Mayo, Suzanna**, Stewards of the Coast and Redwoods.

Establishing valley oaks (*Quercus lobata*) in Groasis® Waterboxxes – a head start for an oak woodland's next generation? **McCurdy, Kate**, UCSB Sedgwick Reserve.

Reaching Out to Under-Resourced, Under-Served Urban Communities: The Tidewater Service Area Project in East Oakland. **Mendoza, Francis**, East Bay Regional Park District.

Stewardship in Action. **Miller-Cripps, Rebecca**, UC Cooperative Extension Central Sierra.

RVOEP Monarch Way Station/Butterfly Habitat. **Monroe, Cathy**, Redwood Valley Outdoor Education Project.

The Monterey Pine Forest: Coastal California's Living Legacy. **Nedeff, Nicole**, The Monterey Pine Forest Watch (See Nicole's book at the Natural History Book Corner, too).

Foundations of an Ongoing Citizen Science Program Monitoring Plant Phenology at Pepperwood in Sonoma County. **Papper, Prahlada**, Pepperwood Preserve.

Citizen Monitoring of Bees in Urban Sonoma, California. **Pawelek, Jaime**, Urban Bee Lab, UC Berkeley.

California Naturalists and Marine Debris Action Teams - Teaching Citizen Science and Reducing Ocean Pollution. **Pincetich, Christopher**, Point Reyes National Seashore Association.

Smartphone Apps and Biodiversity Databases: How Useful Are They Really? **Plummer, Todd**, Wild Marin Nature Tours.



POSTER TITLE, PRIMARY AUTHOR (LAST, FIRST), ORGANIZATION (CONTINUED)

Inland Empire Naturalist: A Collaborative Approach to CA Naturalist Courses. **Raleigh, Carrie**, UCCE.

Assist the Arboretum at UCSC to Become a Member of the Center for Plant Conservation. **Schettler, Suzanne**, Greening Associates.

Interpretative exhibit in abstract collage of common wild animal tracks and gaits in Sonoma County Bodega Dunes and Salmon Creek. **Schindler, Lydia**.

The UC Santa Cruz Fungal Herbarium Sequencing Initiative: Citizen Science, Diverse Communities, and the Mycelium that Binds. **Schwarz, Christian**, UCSC Museum of Natural History Collections.

Lindsay Wildlife Museum: Connecting People with Wildlife to Inspire Responsibility and Respect for the World We Share. **Strongman, Melissa**, Lindsay Wildlife Museum.

New Melones Lake Quagga and Zebra Mussel Prevention Educational Poster. **Suchodolski-Patania, Sandra**, Bureau of Reclamation.

SLEWS Program Changing Hearts, Minds, and Landscapes. **Suzuki, Nina**, Center for Land-Based Learning.

Bladderpod Survival With and Without Gopher Cages. **Young, Brian**, Los Angeles Audubon Society.





NATURAL HISTORY BOOK CORNER AND SILENT AUCTION

Saturday, October 18, 6:30-8:30PM Nautilus Room

To highlight conference partner and California Naturalist authors, the Natural History Book Corner will occur in conjunction with the Saturday, October 18 Poster Reception and Silent Auction. Authors will be present to sell, display, and sign books for conference participants. Representatives with both UC Press and Acorn Naturalists will also sell books at the Natural History Book Corner.

PARTICIPATING BOOK CORNER AUTHORS

Author	Title
Mike Roa	A Guide to the Side of the Sea; Redwood Ed; The Conifer Connection
Elizabeth Vega	The laughing river: a folk tale for peace.
Nicole Nedeff	The Monterey Pine Forest, Coastal California's Living Legacy
John Muir Laws	The Laws Field Guide to the Sierra Nevada; The Laws Guide to Drawing Birds; Sierra Birds: A Hiker's Guide; The Laws Pocket Guide to the Birds of the Sacramento Valley; The Laws Pocket Guide Set to the San Francisco Bay Area
Mary Ellen Hannibal	The Spine of the Continent
Kate Marianchild	Secrets of the Oak Woodlands: Plants and Animals among California's Oaks



SILENT AUCTION

Hand-made cards, journals, stained glass, signed books, wildlife calendars, and more... These are just a few of the items that have already been generously donated for the silent auction scholarship fund. Items will be displayed at the Poster Reception. Proceeds

will help build a scholarship fund to provide opportunities for new California Naturalists. Bring some extra fun money for the auction and you'll be sure to walk away with a unique gift or memento of your trip!



FIELD TRIPS

Conference events wrap up on Sunday, October 19 with fantastic field trips! Sharing borders with the Monterey Bay, City of Monterey, Pacific Ocean, and the Del Monte Forest, Pacific Grove offers breathtaking views and unparalleled recreational activities for Naturalists! For Elkhorn Slough, Fort Ord, or Point Lobos field trips, please meet your van at the circle outside the Chapel at Asilomar at 8:45. Aquarium participants will need to arrange their own transportation to and from the Aquarium (~2.1 miles, one way). We will provide a ride sign-up for those who are interested in carpooling to the Aquarium.

Elkhorn Slough National Estuarine Research Reserve, 9am- 2pm (Meet at the Chapel at Asilomar at 8:45)

We will be joined by staff from the California Department of Fish and Wildlife who manage the research, including citizen science projects, on this incredibly diverse property. We will hike along the trails keeping an eye out for some of the 340 species of birds that call this place home at some point during the year. Our hike will also include a visit to heron and egret rookeries, participation in native plant restoration and learning about the intriguing history and ecology of the Elkhorn Slough.



Fort Ord National Monument, 9am- 2pm

(Meet at the Chapel at Asilomar at 8:45)

The Fort Ord National Monument holds some of the last undeveloped natural wildlands on the Monterey Peninsula. Located on the former Fort Ord military base, the Bureau of Land Management (BLM) protects and manages 35 species of rare plants and animals along with their native coastal habitats. During this field trip, we will hike trails with BLM environmental scientists, range managers and archaeologists through grassland hills, oak woodlands and maritime chaparral.

Point Lobos State Natural Reserve, 9am- 2pm (Meet at the Chapel at Asilomar at 8:45)

During this field trip, participants will have the opportunity to spend time with Pt. Lobos docents (many of the docents are California Naturalists!!) on the trails exploring the natural and cultural history of this phenomenal site. Additionally, the group will get up close and personal with the unique geology of Weston Beach with resident geologist, Dr. Ed Clifton.

Monterey Bay Aquarium, 10:00am- 1pm (Meet outside the Aquarium group sales office at 9:45)

The Monterey Bay Aquarium is one of the leading public science and conservation institutions in the nation, if not the world. During this field trip we will find out what it takes to make the Aquarium run during a VIP behind the scenes tour. Guests will have time to explore exhibits, including the always adorable Sea Otters, the expansive Open Sea tank and the new Tentacles exhibit all about squid, octopi and cuttlefish.



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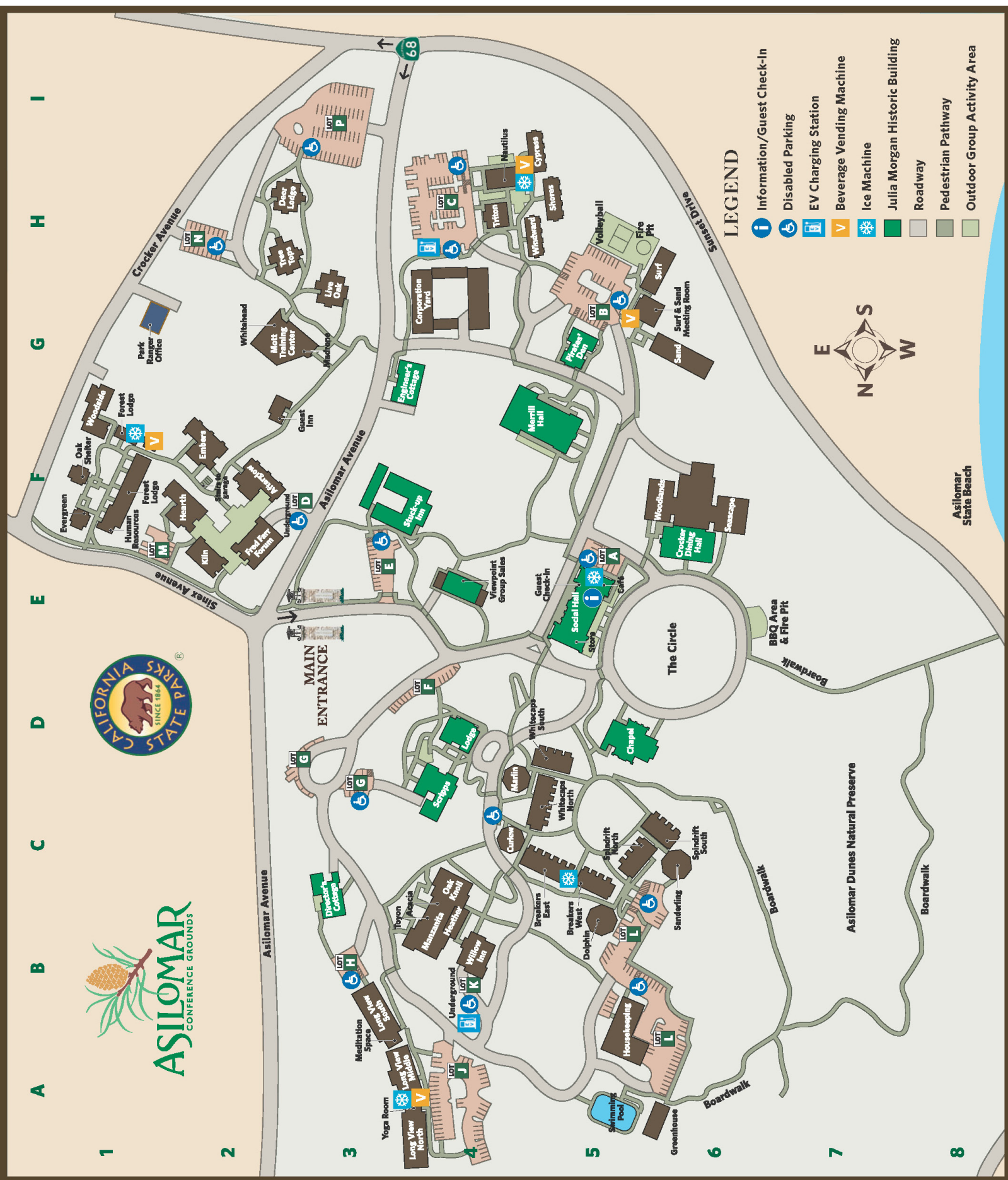
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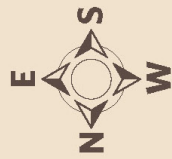
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LEGEND

- Information/Guest Check-In
- Disabled Parking
- EV Charging Station
- Beverage Vending Machine
- Ice Machine
- Julia Morgan Historic Building
- Roadway
- Pedestrian Pathway
- Outdoor Group Activity Area



Asilomar State Beach

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4070 University Road, Hopland CA, 95449
707.744.1424 x104
<http://calnat.ucanr.edu>