



SONOMA  
ECOLOGY  
CENTER

**Sonoma Ecology Center  
2021 UC California Naturalist Course Syllabus**



**Welcome and congratulations for being a part of the spring 2021 Sugarloaf Ridge State Park California Naturalist Program facilitated by Sonoma Ecology Center.**

**Please contact [Tony@sonomaecologycenter.org](mailto:Tony@sonomaecologycenter.org) if you have any problems with the registration process. Full refunds, minus a \$50 processing fee, permitted until March 9.**

**Lead Instructors: Tony Passantino email: [Tony@sonomaecologycenter.org](mailto:Tony@sonomaecologycenter.org);  
& Daniel Levitis email: [Danl@sonomaecologycenter.org](mailto:Danl@sonomaecologycenter.org)**

**Lead Instructor: Tony Passantino, Education Program Manager—*BA in Geography/Environmental Studies, UCLA***

Tony Passantino has extensive knowledge of watershed dynamics and the local ecology of Sugarloaf Park through his coursework in Environmental Studies at UCLA, and significant experience in leading place-based education curricula since 2012 at Sugarloaf Park. He is a certified through Project WET, Project WILD and Project Learning Tree, an Aldo Leopold Foundation graduate and Backcountry Leadership instructor through Bay Area Wilderness Training. He has worked on watershed education and conservation for an international nonprofit focused Tahoe-Baikal Institute, and worked for AmeriCorps at Lake Tahoe on sediment erosion and Best Management Practices. Tony has a talent for leading groups in field-based learning projects, which he brings to his work with students on field trips, summer camps, and classroom programs. He is an avid trail runner and backpacker, recently returning from a 3 month sabbatical, guiding backpacking trips through the Western Highlands of Guatemala. At Sonoma Ecology Center, he leads an educator team that provides free lessons to Sonoma Valley elementary school classes, oversees the Teen EnviroLeaders program and is the Sugarloaf Park Education Coordinator.

**Support Staff/NEST Coordinator: Daniel Levitis, Community Science Coordinator- *Ph.D. in Integrative Biology, UC Berkeley***

Dr. Daniel Levitis is excited to bring people and science together. He is passionate about education, community science, science communication, diversifying the scientific workforce, nature photography, and conservation. His hobbies include wildlife photography, hiking, volunteering, and improvisational carpentry. He has taught university courses in evolution, conservation biology, biogeography, zoology, and ecology, and published original research, with students as co-authors, in top international journals.

## Directions to Robert Ferguson Observatory

2605 Adobe Canyon Road, Kenwood, CA 95452-9065

Sugarloaf Park (707)833-5712     Robert Ferguson Observatory (707) 833-6979

From Highway 12 east of Santa Rosa, turn on Adobe Canyon Road toward Sugarloaf Ridge State Park. Follow the road up the canyon. From the Park's entrance kiosk, proceed straight up the road, following the signs to the observatory. Please drive slowly—hikers and animals abound!

Just past the horse corrals, you will come to a green gate. Drive past the gate, if it's not open then park in the gravel area between the corrals and the green gate, then walk past the gate up the road a short distance to the observatory.

### What to Wear:

Warm layers, gloves and hats. Wool socks and sturdy shoes are helpful for the morning field trips.

### Course Description:

The California Naturalist Program seeks to foster a committed corps of volunteer naturalists and citizen scientists trained and ready to take an active role in natural resource conservation, education, and restoration. The California Naturalist course will introduce you to the wonders of our local ecology and engage you in the stewardship of California's natural communities. The course will combine a science curriculum with guest lecturers, field trips and project-based learning to immerse you in the natural world of the Inner ridge of the Mayacama Mountains. By the end of this course, participants will be able to:

- Understand what it means to be a naturalist
- Understand the abiotic, biotic and cultural factors that make California and the Sonoma Valley natural history and ecology
- Demonstrate skills in making and recording natural history observations in a field notebook and on iNaturalist.org
- Demonstrate skills in communicating and interpreting natural resource information   
Apply knowledge of Sonoma Valley ecosystems to local and global environmental issues.

### Components of the Course:

#### *Class & Readings*

The class will be held weekly on Wednesday nights from 6-8:30 pm over Zoom virtual format.

In preparation for lectures, all assigned readings and corresponding homework assignments from the *California Naturalist Handbook* should be completed before each class where they appear on the syllabus. Evening classes will be a mix of activities with guest lecturers, classroom lecture, discussion, and a small snack break.

### *Field Trips*

Saturday Field trips will be TENTATIVELY scheduled for April 10, April 24 and May 8. Each field trip will run from approximately 8:30am -1:30pm, with the exception of May 8, which will run from 5:00am-8:30am and will include an optional overnight camping trip on Friday, May 7. We will meet at a designated area that will be identified during the previous class. Participants may not bring guests or children on any field trips.

#### *What to bring on the Field Trip:*

- Sturdy walking shoes
- Field Journal
- Dress in layers (cold in the morning but heats up in the afternoon)
- Shade hat
- Sunscreen
- Water bottle
- Cell phone for iNaturalist Program
- Lunch and snacks
- Daypack
- Personal medicine
- Hiking Poles (optional)
- Binoculars (optional, recommend)
- Field guides (optional)

### *Graduation day*

Graduation/Capstone day will be on Wednesday, May 12th preferably in person at Robert Ferguson and the group campground adjacent to it. **This is tentative based on health orders that will be allowed for in-person gatherings and may require presentations to be done in a virtual format.**

### *Field Notebooks*

All participants are required to keep a field notebook during the course. Field notebooks may be checked by the instructor periodically during the class or at the end. We will be using these notebooks during class, on field trips and hopefully on your own time. Keeping a field notebook is one of the best ways of fostering continued learning and getting to know a place intimately. Do not worry about getting anything fancy; a simple blank or lined notebook/journal will suffice.

### *iNaturalist*

Over the course of the California Naturalist class, each participant will be responsible for registering for an iNaturalist account (<http://www.inaturalist.org/>) and adding at least 3 observations per week. We will go over the iNaturalist web tool on the first day of class.

### *Capstone Project*

Participants are required to complete a volunteer service project in one of four areas: Stewardship, Education/Interpretation, Community Science and Program Support. The Capstone project provides an opportunity for participants to integrate the in-class material with an applied work project that is done in conjunction with a natural resource agency or organization. Participants are encouraged to work in teams when appropriate, and in the final class will deliver individual or group presentations on the projects. Presentations will be 5 minutes long per person (so 15 minutes for a 3 person group). The instructor will provide a Capstone project proposal form, list of potential project ideas, and feedback as necessary. Participants who would like to propose a Capstone project that is not on the list will have an opportunity to do so.

### *Attendance*

Participants must attend all evening classes. If an evening class is missed, the participant will be expected to complete make-up activities on their own time at the direction of the instructor. Please consult your instructor if you are going to miss a class. Field trip should not be missed as there is no way that a missed field trip cannot be made up.

### *Homework*

Reading is assigned for each class meeting (check the class schedule below), based on the topic to be covered that day. Participants are expected to read the chapters assigned for that day before the class meeting times, so that the materials are more relevant as they are presented.

### *Volunteer management system (VMS):*

Participants will be provided an on-line account to track their volunteer hours, including hours spent on their Capstone project. Tracking volunteer hours is an essential way to prove the need and impact of a program like the California Naturalist Program.

### *Other Information*

Eating during class is allowed. Each individual will be responsible for their own food and drink.

### **Required Items:**

1. *The California Naturalist Handbook* by Greg de Nevers, Deborah Stanger Edelman and Adina Merenlender
2. A field notebook for nature observations and drawings, pencil(s).
3. Suggested but Not Required: hand lens (10x), binoculars, camera

### **Recommended supplemental reading:**

*Secrets of the Oak Woodlands: Plants and Animals Among California's*, Kate Marianchild Press: 2015

*The Laws Guide to Nature Drawing and Journaling*, Laws, Heyday Press, 2016

*Laws Pocket Guide Set to San Francisco Bay Area*, Laws, Heyday Press, 2014

*An Island called California*, Bakker, E., University of California Press: 1984

*A Natural History of California*, Schoenherr, A.A., University of California Press: 1992  
*Introduction to California Plant Life* (California Natural History Guides, 69), Ornduff et al., UC Press:  
2003

*Trees and Shrubs of California* (Calif. Natural History Guides 62), Stuart, Sawyer, UC Press: 2001  
*California Insects*, Powell and Hogue, University of California Press: 1980

*Mammals of California* (California Natural History Guides, 66), Jameson and Peters, UC Press: 2004

*The Sibley Field Guide to Birds of Western North America*, Sibley, D.A., Knopf Publishing: 2003

**Class Schedule:**

**All evening classes are scheduled from 6:00-8:30pm and all Saturday Field Trips are from 8:30-1:30pm with the exception of May 8 (5:00-8:80am).**

March 17: CA Natural Resources, Communication, and Journaling; Nuts and Bolts of the Program  
Guest speaker: Tony Passantino, Education Program Manager

Reading: Chapter 1 California Natural History & Role of Naturalists

March 24: Citizen Science and Interpretation  
Guest speakers: Dan Levis, Community Science Coordinator

Reading: Chapter 8, Citizen Science

March 31: Geology, Soils & Climate  
Guest speaker: Scott Lawyer, Field Operations Manager and Geologist, Stewards of the Coast and Redwoods

Reading: Chapter 2 Geology, Climate and Soils

April 7: Water  
Guest speaker: Steve Lee, Research Director for Sonoma Ecology Center, UCLA

**April 10: Field Trip- Van Hoosear Wildflower Preserve with Caitlin Cornwall, SEC**

April 14: Forest and Woodland Resources  
Guest speaker: Jason Mills, Restoration Manager Sonoma Ecology Center  
Reading: Chapter 5 Forest and Woodland resources

April 21: Plants

Guest speaker: David Herlocker, Retired Naturalist Marin Open Space District Reading:  
Chapter 4 Plants

**April 24: Field Trip- Van Hoosear Wildflower Preserve with Caitlin Cornwall, SEC**

April 28: Animals

Guest speakers: David Herlocker, Retired Naturalist for Marin Open Space

May 5: Energy and Global Environmental Challenges

Guest speaker: Caitlin Cornwall, Sustainable Sonoma

Reading: Chapter 7 Energy and Global Environmental Issue

**(Friday, Optional) May 7: History of Sonoma Valley Place and People Campfire Session & Sugarloaf Campout**

Guest Speakers: Retired CA State Park retired state archeologist, Breck Parkman, RFO Docents,

**May 8: Fieldtrip SPECIAL TIME (5:00-8:30am) - Sugarloaf Ridge State Park with Dawn Chorus and Breakfast talk with Bernie Krause**

May 12: Capstone Presentations