

# California Naturalist Course

## Sierra Streams Institute



### Instructor

Sol Henson

### Phone

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### Course Start & End

03/12/2025 -  
05/21/2025

### Environmental Stewards Website

<http://calnat.ucanr.edu/>

### Course Fee

Early bird: \$400 (until 1/31)  
Regular: \$450 (until 3/11)

### Course Location

Sierra Streams Institute Office  
117 New Mohawk Road, Suite H  
Nevada City, CA 95959

### Course Schedule

Wednesday Evenings  
6:00pm – 8:30pm

### Course Overview

**General.** UC Environmental Stewards seeks to foster a committed corps of volunteer naturalists and community scientists trained and ready to take an active role in natural resource conservation, education, and restoration. UC Environmental Stewards courses use education and service to inspire and empower individuals to create more sustainable and resilient communities and ecosystems. The California Naturalist course introduces you to the wonders of your local ecology and engages you in the stewardship of California's natural communities. It combines a science curriculum with guest lecturers, field trips and project-based learning to immerse you in the natural world. This California Naturalist course offered through Sierra Streams Institute will focus on the unique ecosystems and watersheds of the northern Sierra Nevada foothills.

### Learning Outcomes

- Understand what it means to be a naturalist.
- Integrate knowledge about the interconnectedness of abiotic, biotic and cultural factors and their influence on the natural history of the northern Sierra Nevada foothills.
- Demonstrate skills in making and recording natural history observations in a field notebook.
- Apply knowledge of the local bioregion to local and global environmental issues.
- Recognize the value of natural and cultural resources to our community/society.
- Meet all course requirements.

### Course Requirements

- **Contact Time:** Each California Naturalist course consists of a minimum of 40 educational hours (classroom hours and field time), which includes a minimum of 8 hours in the field.
- **Required Reading:**
  - **California Naturalist Handbook** by Greg de Nevers, Deborah Stanger Edelman, Adina Merenlender
  - **The Sierra Nevada Bioregional publication from UC ANR California Naturalist Series**
- **Homeworks:** Before each class there is a required reading and homework to complete. This is a 'flipped' style of teaching which allows the content teaching in the class to be much more informative. Homeworks will be submitted by email with a specific naming convention.
- **Class Attendance and Field Trips:** Participants are expected to attend all Wednesday evening classes and Saturday field trips. 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 let us know if you will miss a class. Only one evening class session and one field trip can be missed to receive the certification as long the 40 hour requirement is met.

- **Stewardship Project:** Participants are required to complete a Stewardship Project in one of the program's six volunteer stewardship project areas:
  - 1) Education/Interpretation, 2) Participatory Science, 3) Conservation/Restoration, 4) Environmental and Climate Justice, 5) Community Resilience and Adaptation, and 6) Program Support.
 The Stewardship Project provides an opportunity for participants to integrate their own personal interests with the in-class material toward the development of an applied work project that is done in conjunction with a natural resource agency or organization. Participants must get pre-approval for Stewardship Projects in the first [two] weeks of the course and begin recording their project information and volunteer hours in the UC Volunteer Portal. Participants are encouraged to work in teams when appropriate. Participants will deliver individual or group Stewardship Project presentations (5 minutes long per person) on graduation day. Participants are expected to spend a minimum of 8 hours in addition to the 40 hours in the course on the Stewardship Project and they are required to upload these hours in the Volunteer Portal prior to graduation/certification.
- **Using a Field Notebook and Journal:** All participants are required to keep a field notebook during the course. The course encourages all participants to develop the skills of systematically recording field observations. At the same time, participants can use a journal to reflect on their observations as well as what they have learned in the course. These are the twin goals of the field notebook and the journal. Participants will create a field notebook with entries from all field days and preferably more. Field notebooks may be checked by the instructor periodically during the class or at the end.
- **iNaturalist Observation and Partner iNaturalist Project:** during the California Naturalist course, each participant will be responsible for registering for an iNaturalist account (<http://www.inaturalist.org/>) and adding at least ten (10) observations to the class iNaturalist project. Our iNaturalist project is the [Sierra Streams Institute \(SSI\) California Naturalist project](#).
- **Class Participatory Science Project:** Each participant must contribute to the participatory science project adopted by the class. Our class participatory science project is plant phenology which is the study of the timing of appearance of different plant structures. This project is an important method for tracking climate change impacts.
- **Evaluation:** Completion of the online post-course evaluation survey is highly encouraged. You will be provided with a link to the evaluation survey toward the end of the course.
- **Volunteering and Volunteer Portal:** Participants will be provided with an online account to track their volunteer hours, including hours spent on their Stewardship Project. Tracking volunteer hours is optional but strongly encouraged as an essential way to prove the need and impact of UC Environmental Stewards.

### Recommended Supplemental Reading

- The Laws Field Guide to the Sierra Nevada, Laws, J.M., Heyday Books: 2007
- An Island called California, Bakker, E., University of California Press: 1984



- A Natural History of California, Schoenherr, A.A., University of California Press: Second edition. 2017
- 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, University of California Press: 2001
- California Insects, Powell and Hogue, University of California Press: 1980
- Spring Wildflowers of California of the Foothills, Valley and Coast (California Natural History Guides, 75), Munz, P.A., UC Press: 2004
- 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: Second edition 2016

There are other books on California's natural and cultural history that would also complement this course. Here is a [list](#) that covers several topics and associated books.

### Course Materials

The first three course materials are required. Please notify the instructor immediately if you do not have an email account. The last two are helpful but are not required.

- **Required reading:** [The California Naturalist Handbook](#) by Greg de Nevers, Deborah Stanger Edelman, Adina Merenlender (available at The Earth Store, 310 Broad Street, Nevada City, Harmony Books, 130 Main Street, Nevada City, or your preferred online retailer)
- **Required:** Access to internet connected computer or phone and an email account for communication, Volunteer Portal access, and iNaturalist.
- **Required:** Field Notebook (If you don't own one, the types of journal will be discussed during the first course session.) with pencil(s)
- **Recommended:** Hand lens (10x)
- **Recommended:** Binoculars

### Recommended Resources

- **UC Environmental Stewards website:** View videos from UC Environmental Stewards conferences, meetings, and more. The "Ecosystems of California" video series with Erika Zaveleta, is also available on the channel.  
*Url:* <https://www.youtube.com/channel/UCGBYG5ShV4VDiUiRbEmmObg>
- **Course Participatory Science Portal:** UC Environmental Stewards developed a StoryMap ([https://calnat.ucanr.edu/California\\_PPSR/](https://calnat.ucanr.edu/California_PPSR/)) about participatory science in the program to highlight the different types of projects and the depth of participatory science in the program. In addition, a three part video training ([https://www.youtube.com/playlist?list=PLBEIahTDJmdnk68AHknKbAPBw7SdEp\\_dFX](https://www.youtube.com/playlist?list=PLBEIahTDJmdnk68AHknKbAPBw7SdEp_dFX)) on participatory science drawing on examples from throughout UCANR programs.

### Volunteering and the Volunteer Portal

Participants will be provided with an online account to track their volunteer hours, beginning with hours you spend on your Stewardship Project. You will receive an introductory email invitation to log into the Volunteer Portal, set your password and create your profile. Notify



your instructor if you do not receive that email. You will be accessing the Volunteer Portal to record your Stewardship Project title, information and log a minimum of 8 Stewardship Project hours as one of the requirements for certification. You will need to use the same email address you used to register for the course to log into the portal. **The Volunteer Portal website is: <https://apps.ideal-logic.com/ucanr>.**

Participants are encouraged to complete at least forty (40) hours of volunteer service each year. Tracking volunteer hours after completing the course is optional but strongly encouraged as an essential way to document the impact of the UC Environmental Stewards program. Pins are awarded each year for participants who meet this goal, and the pins differ from year to year.

**Volunteer activities** need to relate to California's natural or environmental history, occur in California, be sponsored by one or more organization, and be unpaid.

- Your 8-hour Stewardship Project will count toward your first year's volunteer hours. You will log these hours into the Volunteer Portal under one of the six Stewardship Project Activities.
  - Stewardship Project (Participatory Science)
  - Stewardship Project (Community Resilience & Adaptation)
  - Stewardship Project (Environmental & Climate Justice)
  - Stewardship Project (Conservation/Restoration)
  - Stewardship Project (Education/Interpretation)
  - Stewardship Project (Program Support)
- After recording your 8 hours for your Stewardship Project, record your additional volunteer hours under the activity that best fits your service. For example:
  - If your Stewardship Project involves restoration, then you select **Stewardship Project (Conservation/Restoration)** as your activity. If you continue to volunteer doing additional restoration work or for something different such as creating a plant guide, choose **Restoration** as your activity in the first case and **Education Materials Production** for time spent creating the plant guide.
- There are resources available to help familiarize yourself with the Volunteer Portal and commonly used features. View useful help guides and videos at [http://calnat.ucanr.edu/Resources/VP\\_Help/](http://calnat.ucanr.edu/Resources/VP_Help/)

### Course Credit

Upon completing certification requirements, participants are eligible for four academic credits through UC Davis Continuing and Professional Education (CPE) for an additional fee. Eligible participants will receive a link to a website and guidance on the process to request and pay for credits. Credits are only processed at the end of each quarter and may take several weeks to arrive.

### Homework Policy

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 presentations can be supported by that foundation of knowledge.

### **Attendance Policy**

Participants are expected to attend all Wednesday evening classes and Saturday field trips. 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 let us know if you are going to miss a class. Only one evening class session and one field trip can be missed to receive the certification. 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 presentations can be supported by that foundation of knowledge.

### **Cancellation Policy**

Registrants may cancel up to two weeks before the first day of instruction for a full refund, minus a \$75 administrative fee. Registrants who successfully refer another student that registers for the course prior to the first day of class will receive a full refund. Registrants who withdraw due to a verified personal or immediate family medical emergency in the two week period prior to or after class begins, will not be granted a refund, but may re-enroll in the following year's course at a 50% discounted rate, with priority for early registration. No other cancellations, for any other reason, will result in a refund.

### **Instructional Methods**

The course will integrate a range of instructional methods that promote active adult learning such as experiential learning, inquiry-based approaches and transformative learning. Instructors are strongly encouraged to build on the participant's prior knowledge and experience, promote peer-to-peer discussion, hands-on activities, and other approaches.

### **Statement on Inclusion and Accommodations**

Sierra Streams Institute is committed to making the California Naturalist course inclusive and to accommodate participants of all abilities and needs. Requests for reasonable accommodations can be made 5 days prior to the date of the program or activity for which it is needed. Please make such requests by contacting Sol Henson at [cnssi@sierrastreamsinstitute.org](mailto:cnssi@sierrastreamsinstitute.org). Please note that class evenings and field days may include moving across uneven terrain such as cobbled stream banks.

If you have a learning or physical need that will require special accommodation in the course, please ***notify your instructors as soon as possible***. This will allow us an opportunity to assess and provide suitable accommodations when possible. Materials may be available in alternate formats (Braille, audio, electronic format, or large print).

### **Statement on Financial Accessibility Cost**



Students are responsible for course fees, purchasing books, and transportation for the field trips. Students are also responsible for costs associated with any travel, meals and camping equipment.

## Class Schedule

<b>Wk</b>	<b>Date</b>	<b>Topic/Subject (instructional activity)</b> (Reading/Assignments Due)	<b>Speaker</b> (Title & Affiliation)
1	3/12	<b>Introduction to Natural History &amp; Course Administration</b> (Ch. 1)	Sol Henson, Director of Education Programs, SSI
2	3/19	<b>Interpretation, Collaboration, &amp; Participatory Science</b> (Ch. 8; Log into Volunteer Portal and set up your profile. Introduction to Stewardship Projects)	Lynn Barakos, Former Professional Learning Specialist at Lawrence Hall of Science
3	3/26	<b>Geology, Climate and Soils</b> (Ch. 2; Stewardship Project Outline)	Marie Davis, Professional Geologist
4	4/2	<b>Water Resources</b> (Ch. 3)	Dave Herbst, PhD. Former Research Biologist at Sierra Nevada Aquatic Research Laboratory
5	4/9	<b>Plants</b> (Ch. 4; Record your Stewardship Project title, short description, Stewardship Project Activity category)	Eric Engles, PhD, Botanist, Betsy Harbert, CNPS, Josie Crawford, Botanist
	4/16	<b>No class – Spring Break</b>	
6	4/23	<b>Animals</b> (Ch. 6; [First Stewardship Project hour(s) in the Volunteer Portal and complete and UCR <a href="#">Sierra Nevada bioregional reading</a> ])	Ted Beedy, PhD, Beedy Environmental Consulting
7	4/30	<b>Forests, Woodland and Range</b> (Ch. 5)	Jeff Lauder, PhD, Forest Ecologist, Executive Director of Sierra Streams Institute
8	5/7	<b>Energy &amp; Global Environmental Issues</b> (Ch. 7)	Jan Maes and Laurie Segal with Sierra Energy Reimagined, Maddison Easley, Working Lands Partner Biologist
9	5/14	<b>Flex Week – Topic Yellow Legged Frog natural history and protection</b> (Document a minimum of 8 volunteer hours spent on your Stewardship Project and associated information in the UC Volunteer Portal - <a href="https://apps.ideal-logic.com/ucanr">https://apps.ideal-logic.com/ucanr</a> ).	Tom Van Wagner- Biologist



<b>Wk</b>	<b>Date</b>	<b>Topic/Subject (instructional activity)</b> (Reading/Assignments Due)	<b>Speaker</b> (Title & Affiliation)
10	5/21	<b>Stewardship Project Presentations and Graduation</b> (Complete Course Evaluation), Graduation Celebration, Potluck, Presentations	Sol Henson, Director of Education Programs, SSI

**Field Trip Schedule:** Bring your nature journals and other items outlined for each field trip.  
(Detailed field trip information and schedule will be provided the week prior to each field trip.)

<b>Wk/ Day</b>	<b>Date</b>	<b>Subject/Topic</b> (time, emergency contact)	<b>Mtg. Location/Time</b> (map link)	<b>Speaker</b> (Title & Affiliation)
2	3/22	Field Trip (9am, emergency contact) (Nature Journal, iNaturalist, Participatory Science Project)	9am at the Nevada County Rood Center	Sierra Streams Education Team with special guest Ali Stefancich
6	4/26	Sierra Foothill Research Extension Center (Rangeland Science)	9am at the Nevada County Rood Center (meeting location may change)	Dustin K Flavell, Andrea Lynn Northup-Warner
9	5/17	Foothill Yellow Legged Frogs and Forests (Stream Ecology)	9am at the Nevada County Rood Center	Tom van Wagner, Biologist

