

UC California Naturalist



Pepperwood

Inspiring conservation through science



Instructor

Summer Swallow, M.Ed.
(she/her/hers)

Contact Info

707.591.9310 x123
SSwallow@PepperwoodPreserve.org

Course Schedule

10 Saturday class sessions
spread across 12 weeks,
January 13 – March 30,
2022; 9:30am-3pm at
Pepperwood
Indoor classroom time and
outdoor field exploration

UC Environmental Stewards Program Website

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

Course Fee

\$450

Course Location

Pepperwood Preserve
2130 Pepperwood Preserve Rd
Santa Rosa, CA 95404

Course Overview: The UC Environmental Stewards program 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. The California Naturalist course will introduce you to the wonders of our local ecology and natural history through guided observation and stewardship. The course curriculum will combine a science-based curriculum with guest lecturers, field trips, and project-based learning to immerse you in the natural world of the Mayacamas Mountains where Pepperwood resides.

Learning Outcomes

By the end of this 10 session course, participants should be able to...

- Describe what it means to be a naturalist.
- Communicate about the natural history of local flora and fauna.
- Describe the interconnectedness of biotic and abiotic factors and their influence upon a landscape.
- Record observations in a field journal and within iNaturalist.org
- Communicate about local environmental issues.

Pepperwood: Located in the heart of Northern California's Sonoma County, a globally-recognized biodiversity hotspot, Pepperwood provides an important refuge for more than 900 species of plants and wildlife and serves as a living laboratory and conservation think tank for researchers and educators from around the world.

Our mission is to inspire conservation through science. We believe that our wellbeing depends on the health of our natural world. Everyday our team studies California's land, water and wildlife so we can educate decision-makers, our community and the next generation about how best to care for the Earth. With guidance grounded in science, we can all take action to sustain the planet that sustains us.

Course Requirements

- **Class Attendance and Field Trips:** This course consists of 50 educational hours (classroom, field time), including a minimum of 24 hours in the field. Each of our 10 class sessions are held at Pepperwood and include time inside the classroom for presentations and discussions plus expeditions outside in the field, rain or shine. Our 10 Saturday classes span 12 weeks, there is *no class on February 3 or March 2*. Participants must attend all 10 sessions of this course to earn a UC California Naturalist certification. If one class meeting is missed, the participant will be expected to complete make-up activities on their own time at the direction of the instructor.
- **Textbook and Course Work:** Read the entire UC California Naturalist Handbook (30% discount available through UC Press, code "UCPSAVE30"), complete all assigned work and check in weekly with the course Google Classroom. *Each assigned Handbook chapter should be read prior to that class session (see pages 8-9 for reading assignments)*, this will make material shared during class more relevant. Required coursework includes a field journal, Stewardship Project and contributions to our Class Participatory Science Project.
- **Field Journals:** Participants are required to keep a field journal during the course which will serve as the primary means of recording observations during our time in the field each class session. Keeping a field journal is an essential skill for naturalists and one of the best ways to foster continued learning of our natural world. *Please bring your field journal and writing implement to every class session.* Your journal can be any easily portable notebook that is comfortable to utilize while standing, sitting or walking outside. Each journal entry should contain basic data (date, time, location, weather, etc), a description of the day's observations (combination of words, numbers, and sketches), plus any supplemental material such as a species list, map, collected specimens, etc. *We will discuss field journals during our first class session.*
- **Stewardship Project:** Participants are required to complete a Stewardship Project in one of six areas: *Community Resilience and Adaptation, Environmental and Climate Justice, Conservation/Restoration/Stewardship, Participatory Science, Education/Interpretation, or 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 done in conjunction with community (neighbors, workplace, local organization, etc). You must get pre-approval for Stewardship Projects in the first three weeks of the course. *You are encouraged to work in teams, up to 4 people.* Everyone will share their Project during a

presentation (5 minutes per person) on graduation day. You are expected to spend a minimum of 8 hours on the Project, and apply these as 8 volunteer hours in the Volunteer Portal. *More information about Stewardship Projects will be provided during our first class session and within the course Google Classroom.*

- **Class Participatory Science Project:** Each participant must contribute to our class participatory science project: [Pepperwood Vital Signs UC California Naturalist Project](#) on [iNaturalist.org](#). Each student is required to post at least 1 observation/ID suggestion per class session, for a total of at least 10 observations/ID suggestion by the end of our course. Only observations taken at Pepperwood during class sessions will be counted. *We will review iNaturalist during our first class session;* if possible, you are encouraged to download the iNaturalist app to your smartphone prior to our first session.
- **Evaluation:** Completion of the evaluation survey is critical for the ongoing success and improvement of the course. Toward the end of the course, you will be provided with a link to the official UC Environmental Stewards Program evaluation and a Pepperwood specific evaluation for additional feedback.
- **[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 an essential way to prove the need and impact of the UC Environmental Stewards Program. (See page 5 for more details about Volunteering)

Required Course Materials

- **Reliable transportation** to and from Pepperwood for Saturday classes
- **our course textbook:** de Nevers, G., Edelman, DS. & Merenlender, A. (2013). *The California naturalist handbook*. University of California Press. (30% discount available through [UC Press](#), code "UCPSAVE30")
- **Field journal** (any size/format) and pen/pencil
- **Items to be Field-Ready (every class meeting):**
 - Sturdy walking shoes, dress in layers, hat, rain jacket/pants, refillable water bottle, lunch & snacks (appropriate for eating on the field), personal medicine, cell phone/camera for iNaturalist observations, backpack, **enthusiasm & curiosity**
 - *Optional:* binoculars, field guides, hiking poles, hand lens
- **Reliable internet and email access** for communication, Google Classroom and Volunteer Portal

- **Google Classroom:** Relevant resources will be posted each week in our virtual classroom. Please *check this space weekly* for course announcements, updates, handouts and optional supplemental resources.

Optional supplemental reading

- Bakker, E. (1984). *An island called California*. University of California Press.
- Laws, J. (2007). *The Laws field guide to the Sierra Nevada*. Heyday Press.
- Harrington, H.D. (1985). *How to identify plants*. Swallow Press Books.
- Young, J. (2012). *What the robin knows*. Mariner Books.

Many excellent field guides exist, find the style and format that's most helpful to you! Here are some you may consider, grouped by category. Consider browsing your local library before purchasing.

- Stuart, J. & Sawyer, J. (2001). *Trees and shrubs of California*, California Natural History Guides. University of California Press.
- Watts, T. (2004). *Pacific coast tree finder*. Nature Study Guild Publishers.
- Vitt, D., Marsh, J. & Bovey, R. (1988). *Mosses, lichens & ferns of Northwest North America*. Lone Pine Publishing.
- Kress, S. & Wolfson, E. (Eds.). (2017). *Pocket birds of North America*, American Museum of Natural History. DK Publishing.
- Kaufman, K. (2005). *Kaufman field guide to birds of North America*. Houghton Mifflin Harcourt.
- Sibley, D.A. (2003). *The Sibley field guide to birds of western North America*. Knopf Publishing.
- Eaton, E. & Kaufman, K. (2007). *Kaufman field guide to insects of North America*. Houghton Mifflin Books.
- Jameson, Jr, E.W. & Peeters, H. (2004). *Mammals of California*, California Natural History Guide. University of California Press.
- Sheldon, I. (1998). *Animal tracks of northern California*, Lone Pine Field Guide. Lone Pine Publishing.
- Stebbins, R. & McGinnis, S. (2012). *Field guide to amphibians and reptiles of California*, California Natural History Guides. University of California Press.

Recommended CalNat Resources

- **YouTube Channel:** View videos from UC Environmental Stewards conferences, meetings, and more. <https://www.youtube.com/channel/UCGBYG5ShV4VDiUiRbEmmObg>
- **CalNat Mapping Tool:** UC Environmental Stewards Program provides a GIS-based map-producing tool you can use for both content delivery and logistics. Choose from multiple base maps and layers to explore bioregions, compare and contrast field sites, create maps to field trips and stewardship projects and more. http://calnat.ucanr.edu/Resources/CalNat_Maps/

Volunteering and the Volunteer Portal

All participants completing this course will receive a California Naturalist pin and certificate. Participants are encouraged to continue performing at least 40 hours of volunteer service each year at an organization of their choosing to receive additional annual pins. Pins are awarded each year for participants who meet this goal, and the pins differ from year to year.

- Volunteer activities must relate to Community Resilience and Adaptation, Environmental and Climate Justice, Conservation/Restoration (Stewardship), Participatory Science, Education/Interpretation, or Program Support, be sponsored by an organization, and be UNPAID.
- **Interested in developing a long-term relationship with Pepperwood? Become a Pepperwood Steward!** Pepperwood Stewards are the cornerstone of Pepperwood's volunteer community. In addition to receiving unique access to the Preserve and special events, these dedicated volunteers have the opportunity to contribute to research and restoration projects while working collaboratively with Pepperwood's network of scientists. Stewards receive discounts on classes and events, and are part of a vibrant community of passionate nature enthusiasts. For more information on becoming a Pepperwood Steward and how to get started, contact Isabel: ILuevano@PepperwoodPreserve.org
- Your 8-hour Stewardship project will count toward your first year's volunteer hours. You (*not your instructor*) will log these hours into the [UC Volunteer Portal](#). A welcome e-mail will be sent to you after your registration information is added to the system; this email will be sent to the email you provided during course registration. You will be provided with a username and password in the introductory e-mail after the start of the class. If you do not find this e-mail after our first class meeting, check your spam folder and then notify Summer.
- The Volunteer portal website is <https://apps.ideal-logic.com/ucanr>.
- There are resources available to help you familiarize with the UC Environmental Stewards volunteer portal and commonly used features. Check out our help guides and videos geared toward users and program administrators: http://calnat.ucanr.edu/Resources/VP_Help/

- **Assignment Policy:** All assignments are due according to the date listed in our Schedule (page 8-9), any modifications will be posted in Google classroom. Prior to each class meeting, you are expected to have read the relevant chapter in our textbook (listed in our Schedule, page 8-9). It is the your responsibility to complete all assignments on time. If there are extenuating circumstances, it is the student's responsibility to contact the instructor to make individual arrangements. If students have difficulty using the google classroom or submitting homework, contact Summer as soon as possible.
- **Attendance Policy:** Participants must complete a minimum of 40 hours of course work comprised of in-person classroom lecture/discussions/field time at Pepperwood, Stewardship Project work, contributions to our class participatory science project and asynchronous independent study. Only 1 class session can be missed, and participants will need to request a make-up session or assignment from their instructor for the missed class. Participants that miss 2 or more classes are not eligible for the UC California Naturalist certificate unless they have received prior approval from the instructor.
- **Cancellation Policy:** A full refund will be given for cancellations 21 days (3 weeks) or more before the start of this program. For cancellations 2 weeks before the program, a 50% refund will be given. Refunds will not be given for cancellations within 7 days of the program start. However, registrants that can successfully refer another student to replace their spot in the course prior to the first day of class will receive a full refund. Registrants that must cancel due to a verifiable medical emergency personally, or in their family, within 2 weeks before the course begins and before the third class meeting on January 27, will receive a full refund. No other cancellations, for any other reason, will result in a refund.
- **Instructional Methods:** The course will integrate a range of instructional methods including in-class presentations, peer-to-peer verbal and written discussions, small group activities, hands-on and inquiry-based activities, experiential learning, field-based explorations and online collaborative resource sharing. Pace of field explorations will be slow to moderate, including a variety of hands-on activities with frequent opportunities for breaks. Requests for reasonable accommodations for disabilities or limitations should be made prior to the date of the program or activity for which it is needed. Please make such requests as early as possible by contacting Summer at sswallow@pepperwoodpreserve.org.

- **Statement on Inclusion and Accommodations:** If you have a learning or physical need that will require special accommodations in this class, you will need to notify your instructor in writing of your accommodation needs. Please notify Summer at least 30 days prior to the first class if you require any special accommodations. This will allow us ample opportunity to provide suitable accommodations. We make reasonable accommodations for persons with documented disabilities. Materials can be made available in alternate formats upon request.
- **Statement on Financial Accessibility Cost:** Students are responsible for course fees and the purchase of the California Naturalist Handbook. Students are also responsible for costs associated with any travel, meals and field gear. Scholarships to reduce the cost of course program fees may be available on a limited basis depending upon need, please email Summer to inquiry about the availability of scholarships.

Course Schedule – *topics & speakers subject to change*

Pre-class homework = complete this before class, be prepared to discuss in class. You are expected to have read the entire textbook prior to our final class meeting.

Field journals will be checked periodically throughout the course. Final due date is March 30.

Wk	Date, Time	Topic	Speaker
1	Jan 13, 9:30am- 3pm	Orientation to Course and Pepperwood <u>Pre-class homework:</u> Handbook chapter 1, 7 & 8 <i>Intro to Handbook, Field journal, Class Participatory Science Project (iNaturalist), Stewardship Projects</i>	Summer Swallow M.Ed., Environmental Educator
2	Jan 20, 9:30am- 3pm	Geology <u>Pre-class homework:</u> Handbook chapter 2 <i>Check in: Stewardship projects</i>	
3	Jan 27, 9:30am- 3pm	Hydrology <u>Pre-class homework:</u> Handbook chapter 3 <i>Due: Stewardship Project Proposal Form</i> <i>Check in: Field journal and Class Participatory Science Project (iNat)</i>	
NO class Saturday, February 3rd			
4	Feb 10, 9:30am- 3pm	Stewardship and Grasslands <u>Pre-class homework:</u> Handbook chapter 4 & 5	

<u>Wk</u>	<u>Date, Time</u>	<u>Topic</u>	<u>Speaker</u>
5	Feb 17, 9:30am- 3pm	Botany Basics plus Ferns and Mosses <u>Pre-class homework</u> : Handbook chapter 4	Summer Swallow
6	Feb 24, 9:30am- 3pm	Forest Ecosystems and Oak Woodlands <u>Pre-class homework</u> : Handbook chapter 5 <i>Check in: Stewardship project updates</i>	
NO class Saturday, March 2nd			
7	March 9, 9:30am- 3pm	Amphibians and Reptiles <u>Pre-class homework</u> : Handbook chapter 6 <i>Check in: Field journal, Class Participatory Science Project (iNat)</i>	
8	March 16, 9:30am- 3pm	Birds <u>Pre-class homework</u> : Handbook chapter 6 <i>Check in: Stewardship project</i>	
9	March 23, 9:30am- 3pm	Mammals <u>Pre-class homework</u> : Handbook chapter 6	
10	March 30, 9:30am- 3pm	Stewardship Presentations and Graduation <i>Due: Stewardship Project, Field journal, Class Participatory Science Project (iNat)</i>	Pepperwood CalNat class of 2024 !!