

Inland Mendocino County California Naturalist Class Spring 2019
Class Syllabus and Information



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Jennifer is a plant biologist focusing on biological monitoring of environmental health, including air quality and forest health; land use management support; and agro-ecology. Her background also includes policy for conservation and environmental sustainability.

The Hopland Research and Extension Center is a 5,358 acre research site offering a wide range of habitats to explore during the field trips. The center's mission is to maintain and enhance ecosystem integrity through applied research, adaptive management, and educational activities.

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 inland Mendocino County.

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 inland Mendocino County natural history and ecology unique.
- 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 inland Mendocino County ecosystems to local and global environmental issues.

Components of the Course:

Class & Readings

The class runs from March 13th to May 18th, with 9 Wednesday evening (6-8:30pm) lectures, and 5 field trip days. Evening classes meet at the UC Cooperative Extension Offices at 890 N. Bush St. (corner with Low Gap Rd.) in Ukiah, unless otherwise noted. In preparation for lectures, all assigned readings from the *California Naturalist Handbook* should be completed before each class where they appear on the syllabus. Evening classes will be a mix of lecture, discussion, eating and some outdoor exploration. Dress appropriately for the weather—you never know when the instructor may send everyone outside!

Field Trips

Saturday Field trips (see below for dates) will run from 8:30am – 2:30 pm. We will meet at the Hopland Research and Extension Center at 4070 University Road, Hopland, unless otherwise noted. Participants may not bring pets, guests or children on any field trips. Directions will be given at the first class meeting.

Graduation day

Graduation day will be Saturday May 18th from 9am-1pm at Hopland Research and extension Center, followed by a potluck picnic lunch.

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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.

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 to the established Inland Mendocino California Naturalist project. 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, Citizen 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. We will deliver individual or group presentations on the projects on graduation day. 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 approved 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 talk to me if you are going to miss a class. Only one evening class session can be missed and still complete the certificate. One field trip can be missed without make-up work.

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. There will be short quizzes or group exercises to reinforce the material in class.

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 need and impact of a program like the California Naturalist Program.

Project Learning Tree (PLT) Educator Integration

This course includes all the requirements for the participant to use Project Learning Tree when the participant chooses the PLT Capstone Template Option and attends a free three-hour training session.

Other Information

Participants may opt to pay an additional \$80 to receive four UC Davis Extension undergraduate academic credits upon course completion and certification. More information will be provided.

This is a zero waste class. Please bring a mug or water bottle for drinks. I will provide washable plates and utensils. We will be taking turns bringing snacks. Please avoid single use items or excessive packaging. There is a sink to wash dishes at the UCCE offices.

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Required Items:

- *The California Naturalist Handbook* by Greg de Nevers, Deborah Stanger Edelman and Adina Merenlender (available locally at the Mendocino Book Company, or online)
- For PLT option only: *Pre K-8 Environmental Education Activity Guide, Project Learning Tree* (guide will be provided free during course for those pursuing this option)
- An e-mail account
- A field notebook for nature observations and drawings, pencil(s)
- Suggested but Not Required: hand lens (10x) and binoculars

Recommended supplemental reading:

A non-comprehensive list of interesting field guides

- *California Insects*, Powell and Hogue, University of California Press, 1980
- *Common Bees of California*, Lebuhn, University of California Press, 2013
- *Grasses of California*, Smith, University of California Press, 2014
- *Introduction to California Plant Life*, Ornduff et al., University of California Press, 2003
- *The Laws Field Guide to the Sierra Nevada*, John Muir Laws, California Academy of Sciences, 2007
- *Macrolichens of the Pacific Northwest*, McCune, B., and Geiser, L., OSU Press. 2009
- *Mammals of California*, Jameson and Peters, University of California Press, 2004
- *Plant Identification Terminology, an Illustrated Glossary*, Harris and Woolf Harris, Spring Lake Publishing, 1997
- *Spring Wildflowers of California of the Foothills, Valley and Coast*, Munz, P.A., University of California Press: 2004
- *The Sibley Field Guide to Birds of Western North America*, Sibley, D.A., Knopf Publishing: 2003
- *Trees and Shrubs of California*, Stuart, Sawyer, University of California Press, 2001

Ecological Perspectives:

- *After the Grizzly, Endangered Species and the Politics of Place in California*, Peter Alagona, UC Press. 2013
- *Ecosystems of California*, Mooney, H. and Zavaleta, E. editors. UC Press. 2016
- *In Full View: Three Ways of Seeing California Plants*: Keator, G., Yamane, L., Lewis, A. Heyday Books & Headlands Center for the Arts: 2001
- *Enough for all*, Rose Smith, Kathleen. Heyday Press. 2014
- *Secrets of the Oak Woodlands*, Marianchild, Kate. Heyday Press. 2014
- *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources*, Anderson, M.K., University of California Press: 2005
- *The Big Burn: Teddy Roosevelt and the Fire that Saved America*, Egan, T., Mariner Books: 2009
- *The Song of the Dodo: Island Biogeography in an Age of Extinction*, [Quammen, D.](#), Scribner: 1997
- *A Natural History of California*, Schoenherr, A.A., University of California Press. 1992
- *An Island called California*, Bakker, E., University of California Press. 1984

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Class Schedule		
Wednesday	March 13 th	<i>Introduction to the California Naturalist Program, California Bioregions</i> Jennifer Riddell & Hannah Bird Reading: Chapter 1 California Natural History & Role of Naturalists
Wednesday	March 20 th	<i>Geology, Soils and Climate of California and the Ukiah Valley</i> <i>Download I-Naturalist</i> Guest Lecturer: Morgan Jones, Mendocino College Reading: Chapter 2 Geology, Climate and Soils
Wednesday	March 27 th	<i>Water Resources and iNaturalist</i> - Jen Riddell Reading: Chapter 3 Water and p. 230-232 Citizen Science
Saturday	March 30 th	<i>Water Resources and Hydrology</i> Derek Acomb, California Department of Fish and Wildlife <i>Start Citizen Science Project - Herpetology Cover Boards</i>
Wednesday	April 3 rd	<i>Interpretation, Communication and Collaboration</i> Jennifer Riddell & Guest Lecturer Maureen Taylor (RVOEP) Reading: Chapter 8 Interpretation & Collaboration
Saturday	April 6 th	<i>Animal Tracking</i> - Meghan Walla-Murphy <i>Citizen Science Project - Herpetology Cover Boards</i>
Wednesday	April 10 th	<i>Animals & Conservation Biology</i> Alex McInturff, UC Berkeley, Brashares Lab Reading: Chapter 6 Animals
	<i>April 17th</i>	<i>SPRING BREAK- NO CLASS</i>
Wednesday	April 24 th	<i>Plants, Plant Communities, Plants and People Jen Riddell,</i> Reading: Chapter 4 Plants
Saturday	April 27 th	<i>Geology Field Trip</i> -Julie Bawcom, Mendo College, retired CDF geologist <i>Citizen Science Project - Herpetology Cover Boards</i>
Wednesday	May 1 st	<i>Plant ID – Jennifer Riddell</i>
Saturday 9am to 2pm Sunday	May 4 th & 5 th	<i>Plants, Birds, and Cultural resources campout (dorm option)</i> <i>Plants:</i> Jennifer Riddell & Emily Allen <i>Bird Walk:</i> Peregrine members, Marisela de Santa Anna, Helen Menasian, <i>Evening star walk:</i> Cathy Monroe <i>Native California Cultural Connections:</i> Sherrie Smith-Ferri, Grace Hudson
Wednesday	May 8 th	<i>Global & Local Environmental Issues</i> Reading: Chapter 7 Energy and Global Environmental Issues Giving effective presentations; Capstone workshop.
Wednesday	May 15 th	<i>Forests & Oak Woodland Management</i> Panel: Mike Jones (UC Cooperative Extension); Mary Mayeda (Mendocino Co. Resource Conservation Dist.), Norm Brown, (retired CalFire) Reading: Chapter 5 Forest, Woodland and Range Resources & Mgmt
Saturday	May 18 th	<i>Graduation: Presentation of Capstone Projects 9 to 1pm, potluck lunch.</i>