Inland Mendocino County California Naturalist Class 2025 Syllabus

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Instructors

Jennifer Riddell is a biologist focusing on biological monitoring of environmental health, including botanical and fisheries studies, air quality and forest health. Her background also includes policy for conservation and environmental sustainability.

Hannah Bird is an educator with a background in conservation non-profit and youth environmental programs, and is a California Naturalist.

Course Site:

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

Course Description:

California Naturalist courses are part of UC Environmental Stewards, whose mission is to foster a diverse community of stewards building toward sustainability and resilience in California's communities and ecosystems through education and service. This California Naturalist course will introduce you to the wonders of our local ecology, engage you in the stewardship of California's natural communities, and introduce you to the cultural connections we have within our landscape. 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.
- Understand the historical and current interactions between people and the landscape, and how indigenous Californians have shaped California's natural systems.
- 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.

Course Components:

The class will be held on six Saturdays, (February 8 & 22, March 8 & 22, and April 5 and 19). Classes will start at 8:30 am and wrap up between 4:30 pm. Our days will include classroom lectures, hands-on activities and field excursions, as well as some evening activities. Come prepared each day with your lunch, good walking shoes and plenty of water. Dress appropriately for the weather – we'll go outside off and on each day.

Readings

In preparation for lectures, all assigned readings from the *California Naturalist Handbook* should be completed before class. A set of questions on the readings for each chapter will be provided before class to help you review the book. ***Graduation will take place from 12:30-3:30 on Saturday April 19th, and includes your presentations of your Stewardship Projects. Family and friends are welcome!***

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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.

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 10 observations** to the established Inland Mendocino California Naturalist project. We will go over the iNaturalist web tool on the first day of class.

Stewardship Project

Participants are required to complete a volunteer service project in one of six areas: *Community Resilience and Adaptation, Conservation/Restoration, Environmental and Climate Justice, Education/Interpretation, Participatory Science, or Program Support*. The Stewardship 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. You 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 Stewardship Project proposal form, list of approved project ideas, and feedback as necessary. Participants who would like to propose a Stewardship Project that is not on the list will have an opportunity to do so.

Attendance

Participants must attend all classes. If a 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 us if you are going to miss a class.

Homework

Reading is assigned based on the topic to be covered each 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.

Volunteering and the Volunteer Portal

Volunteering: Participants are encouraged to complete at least 40 hours of volunteer service each year. Pins are awarded each year for participants who meet this goal, and the pin designs differ from year to year.

Volunteer activities must relate to climate communication, education, interpretation, mitigation, adaptation, or community or ecosystem resilience, occur in California, be sponsored by an organization, and be unpaid or part of a subsidized workforce development program (e.g., CCC, NFF, AmeriCorps).

Your 8-hour Stewardship project will count toward your first year's volunteer hours. You will log these hours into the UC Environmental Stewards Volunteer Portal). A welcome e-mail will be sent to you after instructors add your information to the system. Please use the link in the email to log into the portal, set your password and set up your account. Notify your instructor if you do not receive that e-mail. Here are help guides and videos: http://calnat.ucanr.edu/Resources/VP_Help/ You will also record in the portal your Stewardship Project title, upload any documents or links, and log the initial eight hours of volunteer service spent on the project. These hours will count toward your 40 hours of service during the first year. The Volunteer Portal can serve as one location to track volunteer service with multiple organizations. Qualifying volunteer hours that may be recorded on another organization's platform can also be entered into the UC Volunteer Portal and count toward UC Environmental Stewards 40-hour annual pin and other recognition levels.

Course Credit

Upon completing certification requirements, participants are eligible for academic credits through UC Davis Continuing and Professional Education for an additional fee. ***Graduates interested in this opportunity should communicate with their instructor within 2 weeks of completing the course***.

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)

- An e-mail account for course communications
- A field notebook for nature observations and drawings, pencil(s)
- Suggested but Not Required: hand lens (10x) and binoculars

Course Credit

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ADDITIONAL RESOURCES

Great naturalist apps:

- Merlin (birds): https://merlin.allaboutbirds.org/
- Seek (gamified version of iNaturalist): https://www.inaturalist.org/pages/seek_app
- iNaturalist (nature observations, community science): https://www.inaturalist.org/home
- Nature's notebook (phenology observations): https://www.usanpn.org/natures_notebook
- Rockd (geology app): https://rockd.org/

RECOMMENDED SUPPLEMENTAL READING - There are so many good field guides and natural history related books out there. If you have a favorite that is not on this list, please share it with the class.

An incomplete 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
- *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:

- *The Home Place, Memoirs of a Colored Man's Love Affair with Nature*, J. Drew Lanham, 2017
- *After the Grizzly, Endangered Species and the Politics of Place in California*, Peter Alagona, 2013
- *Coyote America,* Dan Flores, 2016
- *Ecosystems of California,* Mooney, H. and Zavaleta, E. editors. 2016
- *In Full View: Three Ways of Seeing California Plants*: Keator, G., Yamane, L., Lewis, 2001
- *Enough for all,* Kathleen Rose Smith, 2014
- *Secrets of the Oak Woodlands,* Kate Marianchild, 2014
- *Tending the Wild: Native American Knowledge and the Management of California's Natural Resources*, M.K. Anderson, 2005
- *The Big Burn: Teddy Roosevelt and the Fire that Saved America,* T. Egan, 2009
- *The Song of the Dodo: Island Biogeography in an Age of Extinction*, D. Quammen, 1997
- *A Natural History of California*, A.A. Schoenherr, 1992
- *An Island called California*, E. Bakker, 1984
- *What the Robin Knows: How Birds Reveal the Secrets of the Natural World,* Jon Young, 2013

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Saturday, February 8, 2025

Introduction/Orientation/Biogeography/TEK **Reading: Chapters 1, 8**

8:30	Welcome, Introductions, Course Overview – Jen Riddell and Hannah Bird
9:00	Nature journaling
10:00	Introduction to California's biodiversity
10:45	Stewardship project introduction and Chapter 8 discussion – Jen Riddell
11:15	Wildlife Cameras
12:00	Lunch
12:30	Traditional Ecological Knowledge with Corine Pearce
4:00	Daily wrap up
4:30	Class ends
	Additional Homework: **KCET videos on Tending the Wild - watch at least two episodes** https://www.pbssocal.org/shows/tending-the-wild#episodes

Saturday, February 22, 2025

Geology **Reading: Chapters 2 and 3**

8:30	Group discussions
9:00	Reading topographic maps and understanding watershed principals
10:00	Introduction to California's geology - Morgan Jones
11:15	Angle of repose exercise - Morgan Jones
12:00	**Lunch**
12:30	Citizen/Community science – apps and practice
1:00	Geology in the landscape - bring your notebooks and maps
3:00	Stewardship project Q&A - and potential project partners
4-4:30	Daily wrap up
	Homework: Movie - A River's Last Chance - https://www.pacificrivers.org/a-rivers-last-chance1.html (Free link to be provided for free viewing, donations to the filmmakers are welcomed)

Saturday, March 8, 2025

Hydrology **Reading: Chapter 3, and watch A River's Last Chance**

8:30	Small group discussion, Review A River's Last Chance, geology
9:00	Watersheds from the landscape level - lecture and discussion- Jen Riddell and possible guest
9:45	Hydrology walk: Knowing your place in the landscape – riparian zones and watersheds
11:30	Nature Journaling
12:00	Lunch
12:30	Dams and Rivers and watershed restoration
1:45	Pond Restoration and Cover Board Community Science Project
3:00	Wildlife cameras - pull and review the footage
3:30	Stewardship Q&A, Interpretation and presentation styles
4-4:30	**Daily wrap up**

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Saturday, March 22, 2025

Forest, Woodland and Range Resources Management **Reading: Chapter 5**

8:30	Small Group Discussions – Place based science and forestry
9:00	California habitats, fire modeling and behavior, and Prescribed burns – Hannah, Jen
10:00	Forestry practices and prescribed burning – Dr. Mike Jones (University of CA Cooperative Extension)
11:30	Forestry walk Discussion of historical fire patterns, Cultural burning, and Prescribed Burn Associations Discussion of fire's role in the landscape Discussion of various careers in forestry, and the ties to other natural resource careers
12:30	**Lunch in the field**
2:00	Taxonomic Hierarchy & Basic plant identification characteristics – Jen Riddell
2:30	Plant ID practice with oaks- Jen Riddell
4-4:30	**Daily wrap up**

Saturday, April 5, 2025

Plant Ecology **Reading: Plant and Wildlife Chapters**

8:30	Small group discussions and review for watersheds and plants
9:00	Phenology and Citizen Science - go outside to take data
9:45	Plants and Plant Communities – Jen Riddell
10:30	Plant field trip Jen Riddell - Who are these plants, ecological roles, and human uses.
12:00	**Lunch on field trip**
1:00	Climate Stewardship and bigger environmental issues Class wrap up topics
4-4:30	**Daily wrap up**
Bonus Homework watch ***Saging the World*** (20 min) https://www.cnps.org/conservation/white-sage	

Saturday, April 19, 2025

Time **Climate Change, Graduation** **Reading: Chapters 6 and 7**

8:30	Small group discussions and review
9:00	Bird language and birding with Marisela de Santa Anna
12:00	**Lunch**
12:30	California Naturalist Community - What's up next?
1:00	Stewardship Project Presentations and Graduation
3:30	**Cake and group photos!**

Guest Speaker Contact Information:

Derek Acomb (Hydrology, CDFW): Derek.Acomb@wildlife.ca.gov
Mary Mayeda (Forestry, NRCS Forest Advisor): Mary.Mayeda@usda.gov
Corine Pearce (Traditional Ecological Knowledge): corine.pearce@gmail.com, https://corinepearce.com/
Dr. Mike Jones (Forestry, UCCE Advisor): mjones@ucdavis.edu - (https://ucanr.edu/?facultyid=40642&facultyid=40642), https://calpba.org/mendocino-pba, https://www.andersonvalleyfire.org/
Morgan Jones (Geology, Mendocino College Faculty): mjones2@mendocino.edu
Marisela de Santa Anna (Mendocino County Resource Conservation District): marisela@mcrcd.org