

Swan Valley Connections Master Naturalist Program

Condon, MT

6 Day Program 2023



Overview

SVC's Montana Master Naturalist course offers skills to deepen understanding, appreciation, and stewardship of the natural world. During four weekends of experiential, field-based education, participants learn to identify species, interpret behaviors, and affirm ecological relationships. This foundational, applied knowledge not only enriches a sense of place, but also builds the confidence, attention, and curiosity to respect and conserve diverse ecosystems.

Expected student learning outcomes

- Articulate what a naturalist is, and why their contributions have been significant to science and society
- Describe the basic levels of organization in ecology: organisms, populations, communities, and ecosystems
- Practice basic field study skills through observation with use of tools including: field journals, binoculars, hand lenses, measuring tapes, field guides, and dichotomous keys
- Describe major habitat types of the Northern Rocky Mountains and how they fit in an elevational gradient: (sub)alpine zones, wet forests, dry forests, and riparian/wetland communities
- Identify diverse native mammals, birds, plants, insects, reptiles, and amphibians with key characteristics, life histories, ecological adaptations, habitat associations, and conservation implications
- Interpret observations of nature, with confidence to inform and inspire others
- Recognize opportunities to use natural history skills in citizen-science, natural resource inventory, and monitoring to inform conservation

Required Materials

Each student will need a field journal. General art supplies will be provided, but feel free to bring your own

Assignments

1. Pre-course Reading and Reflection – “The Naturalist” (Barry Lopez, *Orion*) and “The Rise and Fall of Natural History” (Robert Michael Pyle, *Orion*). Please come prepared to discuss the readings and briefly reflect on the following: Describe an important person, place, or observation that kindled your curiosity about the natural world? You may write up a response if that is helpful, but not required. (10 Points)
2. Seasonal Round – A “Seasonal Round” that reflects how you connect with your natural surroundings through the year. It can feature phenomena including but not limited to: local food sources, phenological changes, recreational activities, etc. (10 Points)
3. Field Journal – 4 entries based on direct observation while in the field or by looking at lab specimens. Each should include the date, weather, written observations, and drawing. One entry should be an “event map.” Please note these will be reviewed for evidence of curious interpretation of what you see, and not on artistic talent. (40 Points)
4. Quizzes – 1 single question based on our observations from the day before. (10 Points – 5 Quizzes at 2 Points Each)
5. Oral Presentation – 5-minute presentation to dive deeper into a topic of personal interest using natural history interpretation skills. (10 Points)
6. Class Attendance – Each student is expected to participate throughout the entire course. Please note that to receive the Master Naturalist Certification, students must attend 40 hours of instruction. (20 Points)



Welcome Day – Sept. 22nd, 2023

Time	Topic	Activity	Location
1:00 PM	Welcome!	Safety Talk, SVC Orientation	SVC Office
2:30 PM	Being a Naturalist – Intro to Course, Skills, Assignments; Getting to know each other * Share Pre-Course Assignment Reflections	Lecture, Discussion, Activities	SVC Office/Field
5:00 PM	End of Day Review	Discussion	SVC Office

Habitat Ecology – Sept. 23rd, 2023

Time	Topic	Activity	Location
8:00 AM	Daily Overview, Intro to Birds	Lecture	SVC Office
9:30 AM	Depart for Fieldwork: Bird Observation; Intro to Habitat Types and Species Interactions	Observe, Learn, Practice	Field
3:00 PM	*Share Seasonal Rounds	Discussion	SVC Office
4:00 PM	End of Day Review	Discussion	SVC Facility

Plant Ecology – Sept. 24th, 2023

Time	Topic	Activity	Location
8:00 AM	Daily Overview, Intro to Plants	Lecture	SVC Office
9:30 AM	Depart for Fieldwork: Herbaceous Plant Survey; Intro to Forest Trees of Montana; Intro to Biogeography and Geology	Observe, Learn, Practice	Field
5:00 PM	End of Day Review	Discussion	SVC Office

Wildlife Ecology – Sept. 25th, 2023

Time	Topic	Activity	Location
8:00 AM	Daily Overview, Intro to Mammals, Skull Session	Lecture	SVC Office
10:30 AM	Depart for Fieldwork: Mammal Ecology and Intro to Forest Trees of Montana	Observe, Learn, Practice	Field
3:00 PM	Study Hour	Field Journaling, Reflection	SVC Office
4:00 PM	End of Day Review	Discussion	SVC Office

Wetland & Insect Ecology – Sept. 26th, 2023

Time	Topic	Activity	Location
8:00 AM	Daily Overview, Intro to Insects	Lecture	SVC Office
9:30 AM	Stream/Riparian Ecology – Macroinvertebrate Survey	Observe, Learn, Practice	Field
12:30 PM	Wetland Ecology	Observe, Learn, Practice	Field
3:30 PM	Presentation Prep / Study Hour	Observe, Learn, Practice	Field
5:00 PM	End of Day Review	Discussion	SVC Office

BioBlitz & Master Naturalist Day – Sept. 27th, 2023

In this final day, you'll apply what we've learned through with short oral presentation, and you'll integrate and practice your observation skills in our 2nd Annual Master Naturalist BioBlitz!

Time	Topic	Activity	Location
8:00 AM	Oral Presentations	Presentations	SVC Office
10:00 AM	BioBlitz	BioBlitz	Field
3:00 PM	Award of Certifications; Talk on how to maintain and grow Your skills *Evaluations Due	Discussion	SVC Office