



STRAUB OUTDOOR SCHOOL

A GUIDE FOR TEACHERS AND SCHOOL ADMINISTRATORS



Fall 2023/Spring 2024



StraubOutdoors.org

welcome to Straub Outdoor School!

Hablamos español.
Envíe un correo electrónico a
Info@StraubOutdoors.org.



At Straub Outdoors, we provide high-quality, nature-based educational programs taught by caring, responsible, college-educated naturalists.

Our outdoor school focuses on Oregon's habitats, natural resources, and the ecological wisdom of Indigenous and immigrant cultures. Bilingual (Spanish-English) instructional support is available upon request. We offer three formats: Nature Academy, Nature Scouts, and Nature Connections. In this guide, you'll find details about each option.

**"You guys did an excellent job.
Our students will never forget this
experience."**

Yesenia Anaya Vallejo
Bush Elementary, Salem, Oregon

NATURE ACADEMY

Students spend several days and overnights learning in nature at a scenic camp location. Includes NGSS-aligned instruction, educational materials, field supplies, lodging, meals, campfire programs, and a virtual or in-person pre-trip classroom visit. Choose 2-3 overnights.

Educational Hours: 18-24

NATURE SCOUTS

Interested in a day-trip outdoor school option (no overnights)? Combine in-person ecology field trips with 1-2 engaging classroom visits. Includes NGSS-aligned instruction, educational materials, field supplies, trail snacks, and supplemental classroom activities. Choose three full-day trips or four half-day field trips at one or more locations.

Educational Hours: 18

NATURE CONNECTIONS

Our engaging CDL outdoor school program includes six virtual classroom visits led by our naturalist-educators plus high-interest science projects that students can complete at home or in class. This program can take place over multiple days or weeks. Includes a naturalist kit for each student.

Educational Hours: 18

Visit our website for more information, including sample lessons, photos, and videos: StraubOutdoors.org.



Learning in Nature

Nature Academy and Nature Scouts both include opportunities for hands-on investigations outdoors through seven areas of inquiry with options for dual-language (Spanish-English) materials and instruction:

- **Terrestrial Ecology**
Forest & grassland ecosystems
- **Freshwater Ecology**
River, stream, pond & wetland ecosystems
- **Natural Resource Management**
Agriculture, aquaculture, forestry, wildlife, and watersheds
- **History & Culture**
Oregon's cultural & ecological heritage, from Indigenous and immigrant perspectives
- **Coastal Ecology**
Marine and coastal lowland ecosystems (See our Nature Academy programs at Camp Baker & Drift Creek Camp for this area of inquiry.)
- **Climate Change Studies**
How climate change is impacting regional ecosystems and ways humans are addressing and mitigating these impacts
- **Health & Wellness**
Physical fitness, socio-emotional wellness, and nutrition

“Your instructors were phenomenal. I was impressed with their demeanor and professionalism. They were really good with our students . . .”

Paul Keefer
Windy River Elementary
Boardman, Oregon



How much does it cost?

- Nature Academy** (4 days/3 overnights) : \$589/student
- Nature Academy** (3 days/2 overnights): \$439/student
- Nature Scouts** (4 half days/0 overnights): \$329/student
- Nature Scouts** (3 full days/0 overnights): \$319/student
- Nature Connections** (virtual/CDL): \$289/student

100% of the costs for Straub Outdoor School are eligible for Measure 99 grant funding. This means there is no cost to public, charter, and homeschool groups for students in Grades 5 or 6 to participate. For Nature Scouts, full days are 9:15 am - 4:15 pm and half days are 9:15 am - 1:15 pm.



NATURE SCOUTS

Nature Scouts is our non-residential/hybrid in-person outdoor school option. It includes a customizable combination of 3-4 ecology field trips, 1-2 in-person or virtual classroom visits, and supplemental in-class/at-home science activities. Nature Scouts field studies take place at your choice of four beautiful state parks.

Minimum: 20 students | Maximum: 70 students.

Silver Falls State Park

Located in the foothills of the Cascades, the hiking trails in this majestic park provide opportunities to explore towering forests, mountain streams, and historic features offering clues to the lives of the Kalapuyans, Molallans, and Euro-American settlers.

Willamette Mission State Park

Nestled in the Willamette Valley, this park has more than 1,600 acres of woodlands, riparian habitats, meadows, and orchards. Field studies include a ride across the river on the Wheatland Ferry and riverbank explorations.

Champoeg State Heritage Area

Originally a Kalapuya village, this is the site where Oregon's first provisional government was formed in 1843. Situated near the Willamette River, the park's forests, meadows, and wetlands echo the landscape of bygone eras.

Milo McIver State Park

Situated along the scenic Clackamas River, this park has it all: the river, forests, and meadows. The Clackamas Fish Hatchery is also located at the park and guided tours of the hatchery illuminate the life-cycle of Chinook salmon and steelhead.

“It is important for students to be in nature not only to connect with the environment but also to connect with themselves and others. Spending time outdoors also promotes student creativity, reduces stress and fatigue, and teaches responsibility.

Working in a Title 1 school, I see firsthand the challenges families in poverty face. By providing outdoor education opportunities to all students, we level the playing field.”

Meagan Lamb
Kennedy Elementary
Keizer, Oregon

Email Info@StraubOutdoors.org or call 503-779-5227 to reserve a Nature Scouts or Nature Academy outdoor school session,



Nature Academy is an immersive overnight outdoor school experience at your choice of several well-maintained camp facilities in ecologically rich areas on the picturesque Oregon Coast. Includes intertidal and dune ecology field studies.

Most cabins are heated and ADA-accessible and all communal buildings are ADA-accessible. Healthy meals are prepared by professional staff with vegetarian, vegan, and allergen-free menu options.

To learn more about our camp locations, see the following pages. Camp tours are available upon request. For details and available dates email us at Info@StraubOutdoors.org or call 503-779-5227.



NATURE ACADEMY



DAILY ACTIVITY SCHEDULE

7:00a	Rise and Shine! Early Bird Activities
8:00a	Breakfast
8:30a	Morning Circle
8:45a	Field Studies 1
10:15a	Morning Snack
10:30a	Field Studies 2
12:00p	Lunch
12:45p	Brain Break! Activities
1:15p	Field Studies 3
2:30p	Afternoon Snack
2:45p	Field Studies 4
4:00p	Choose Your Own Adventure! Activities
5:00p	Dinner
5:45p	Field Studies 5
7:00p	Campfire Program
8:00p	Night Owl Activities/Showers
9:00p	Cabin Time
10:00p	Lights Out/Quiet Time

Our Camp Partners

Our 2023-24 Nature Academy residential outdoor school sessions are offered at four beautiful camp locations: Drift Creek Camp, Molalla Retreat, Wi-Ne-Ma Camp, and Camp Baker.

Minimum: 20 students | Maximum: 70 students.

DRIFT CREEK CAMP

Lincoln City, Oregon



This gem of a location is nestled in a bend of Drift Creek just minutes from Lincoln City and about 90 minutes from Salem. It has a Main Lodge with two floors of dorm-style beds and several smaller adjacent rooms for chaperones. It also has an ADA-accessible room on the first floor, along with a lounge, nature center, and dining area.

Chaperones can either sleep in the bunk beds with the student groups or they can sleep in the chaperone rooms, which are on each sleeping floor next to each dorm area.



The forest surrounding the camp and the creek offer endless field-study opportunities. There are also optional offsite field-studies at Drift Creek Trail and at Roads End Beach near Lincoln City.



A covered area is available for rainy day activities and a campfire amphitheater is the perfect place to end each day. The dining area, a lounge, and a nature center are also located in the main lodge.



WI-NE-MA CAMP

Pacific City, Oregon



Situated between a freshwater lake and a secluded beach, Wi-Ne-Ma Camp is the best of both worlds. With an abundance of native plants, trees, and wildlife, including river otters, raptors, and many seashore species, this camp is a hidden gem on the Oregon Coast.

The camp also has modern amenities, including WiFi, heated cabins, bathrooms and showers in the lodging areas, an indoor gym for rainy-day activities, and two spacious meeting rooms for our science labs. Recreation activities include disc golf, basketball, volleyball, and a HUGE slide!



All ecology field studies take place onsite at the camp. Students have opportunities to explore the beach for intertidal discoveries, walk along the lakeside to investigate freshwater habitats, and meander through groves of native shore pines.



This camp offers a rustic, yet civilized outdoor experience and all buildings are well maintained and ADA-accessible. Cabins can accommodate up to 10-15 people, including students and chaperones. A wellness center/nurse's station is also available.



MOLALLA RETREAT

Molalla River Corridor, Oregon



This beautiful camp is located on a gentle stretch of the Molalla River about 75 minutes from Salem. It's an ideal setting for small school groups (up to 35 students plus classroom teachers and chaperones).

The Molalla Retreat has a main lodge with two wings of dorm-style beds. It also has a chaperone sleeping room in the middle of the two wings with a double bed and two bunk beds. In addition to these accommodations, there is an ADA-accessible cabin with 14 additional beds.

Restrooms and showers are located in the main lodge and cabin. Indoor and outdoor dining areas and a lounge are also located in the lodge.



A nature trail encircles the retreat campus and passes by the river, providing access to freshwater ecology studies. There are wooded areas for forest ecology lessons, grassy clearings for group activities, and a gazebo for small-group meetings.



Wilderness skills and culturally responsive activities highlighting the Molallans and other regional Indigenous Tribes are also included in our outdoor school program at this location.



CAMP BAKER

Florence, Oregon



Hundreds of acres on a private peninsula overlooking Siltcoos Lake offer endless opportunities for nature explorations and life science investigations. Located just south of Florence near the Oregon Coast, Camp Baker is an idyllic forested setting with opportunities for wildlife viewing around every bend.

Camp Baker has rustic Adirondack cabins as well as heated cabins with common areas. A new ADA-accessible shower house will be completed by Spring 2023. This camp also includes field-study shelters, a spacious dining hall, and a lounge for classroom teachers and chaperones.



Onsite field studies highlight forest ecology and offsite field-study trips include dune ecology at nearby Honeyman State Park and intertidal ecology at Sunset Bay State Park or Washburne State Park. Busing is required to the parks.



An outdoor amphitheater provides a perfect location for evening campfire programs, led by our educators, that include storytelling and songs.



SAMPLE ITINERARY

- 9:15 am **Students arrive at the camp or state park**
- Gather in Discovery Teams (learning groups)
 - Name buttons, field bags, and nature journals are distributed
- 9:30 am **Morning Circle**
- Welcome to outdoor school! | Ice breaker
 - Practice attention signals
 - Safety Superstars: Review health & safety rules
 - Oregon Tribes land acknowledgment
 - Socio-emotional check-in
 - Recite the kindness pledge | Review “sticks, stones & stems” challenge
 - Ready, Set, Discover! Itinerary Preview
- 9:45 am **Field-studies - Ecosystem Explorations**
- Students walk to a nearby waterway or to the edge of a meadow or forest and are given time to explore this habitat and note the living (biotic) and non-living (abiotic) things they find.
 - Guiding questions: How are biotic and abiotic elements connected? Where do the living things get their food energy? What signs of animals are present? What do these signs tell us about this ecosystem?
- 10:45 am **Restroom | Snack | Hydration Break**
- 11:00 am **Field-studies - Amazing Animal Adaptations!**
- Students sit in a circle on the ground. They examine skulls and pelts from four species of squirrels while learning about the two ways that animals adapt to their habitats: physical and behavioral. Examples are given of how local squirrel species have adapted to survive.
 - Students draw a “Super Squirrel” with a new kind of adaptation.
 - Guiding questions: How do adaptations help animals and plants survive? What are examples of physical and behavioral adaptations? How have humans adapted to survive in their environments?
- 12:00 pm **Restroom | Lunch**
- 12:30 pm **Choose Your Own Adventure! Activities** (See next page for details)
- 1:00 pm** **[End of Nature Scouts half-day non-residential itinerary]**
- 1:00 pm **Field-studies - Food Web Scavenger Hunt!**
- Students are introduced to the concept of a food web and study resource photos of producers, consumers, and decomposers.
 - Using field guides, each Discovery Team identifies plants, animals, and other organisms and their roles in a food web.
 - Students draw and label the organisms in a simple food web in their journals using shading, textures, and color to add information.
 - Guiding questions: How do organisms interact with each other and the environment? How do matter and energy flow through a food web?



- 2:00 pm **Field Studies - Freshwater Ecology**
- Students regroup into their Discovery Teams to investigate a freshwater stream, river, pond, or wetlands.
 - Students are introduced to the role of macroinvertebrates in indicating water quality and their roles in a freshwater food web.
 - Students work in small inquiry groups to catch and identify various macroinvertebrates, after which they record this data and determine the relative quality of the water.
 - Students measure the pH, turbidity, and temperature of the water to help determine if the conditions are habitable for salmon.
 - Guiding Questions: What are macroinvertebrates? How do the species of macroinvertebrates in a freshwater habitat help us determine the level of pollution in the water? What do the macroinvertebrate species that live in this habitat eat? Which animal species eat the macroinvertebrates? What would happen if macroinvertebrates disappeared? What are some impacts humans have on water quality?
- 3:15 pm **Restroom | Snack | Hydration Break**
- 3:30 pm **Reflection Circle**
- 4:00 pm **[End of Nature Scouts full-day non-residential itinerary]**
- 4:00 pm **Choose Your Own Adventure! Activities**
Disc Golf • Watercolor Painting • Forest Games • Nature Rocks! Comics
Creekside Critters Skit • Friendship Bracelets • Wilderness Skills
- 5:00 pm **Dinner | Announcements**
- 5:45 pm **Evening Lodge Lesson - Indigenous Seasonal Rounds & First Foods**
- Students learn about, and taste foods that have been traditionally used and eaten by regional Tribes, including hazelnuts, pine nuts, blueberries, cranberries, venison jerky, and fir tip tea.
 - Students are introduced to the concept of seasonal rounds (eating according to the season) and each student creates a seasonal food calendar of their own featuring foods they like to eat in each season.
 - Guiding Questions: How does the seasonal availability of traditional foods influence annual migrations, intra- and interfamilial bonds, and cultural identity? How do Tribal communities prepare foods for storage and periods of scarcity? What are the historic relationships between wildcrafting and trade between Tribes and with white settler-colonists?
- 7:00 pm **Campfire Program Tribes and**
- 8:00 pm **Night Owl Activities**
Nature-and science-themed board games, arts, crafts, puzzles, glow-in-the-dark capture the flag, owl prowl night hikes & nature documentaries
- 9:00 pm **Cabin Time | Showers**
- 10:00 pm **Lights Out | Quiet Time**



We've translated our outdoor school program into a virtual/CDL format for elementary and middle school students who attend school online.

Nature Connections is a series of six ecology-themed units that highlight Oregon's wildlife, native plants, rivers, agriculture, forestry, and cultural history from multiple perspectives. Synchronous classroom visits with our educators and engaging asynchronous field studies focus on the following NGSS Disciplinary Core Ideas:

PS3.D – Energy in Chemical Processes and Everyday Life

LS1.C – Organization for Matter and Energy Flow in Organisms

LS2.A – Interdependent Relationships in Ecosystems

LS2.B – Cycles of Matter and Energy Transfer in Ecosystems

ESS2.A – Earth Materials and Systems

ESS2.C – The Roles of Water in Earth's Surface Processes

ESS3.C – Human Impacts on Earth Systems

LS4.B – Natural Selection / LS4.C – Adaptation

Nature Connections and hybrid options are currently eligible for outdoor school Measure 99 funding. For details, visit: OutdoorSchool.oregonstate.edu.



Each of the six virtual outdoor school units also includes the following resources:

- **Naturalist Kit** - Colored pencils, magnifying lens, field bag, and all supplies needed for the field studies and classroom visits.
- **Learning Journal** - Student instructions and resources for completing the learning activities. Includes guiding questions, prompts, examples, helpful web links, and space to document learning
- **Educational Video** - A short narrated video illuminating each Core Idea



“This was an excellent experience. I am impressed and grateful at how well curated in terms of interactions, information, and activities/supplies this virtual Outdoor School was from beginning to end.”

Melissa Reid, Hilda Lahti Elementary, Knappa, Oregon

Day 1 | We Eat Sunlight! – Where does the energy in food come from? (NGSS PS3 Energy)

- Classroom Visit: Plant Producers & Energy Transfer (1 hour)
- At-home/At-school Learning Activity: Make a Food Energy Poster (1 hour)
- Extension Activity: Kalapuya First Foods Calendar (.5 hour)
- Extension Activity: Should Kids Eat Fast Food? (persuasive writing) (1 hour)

Day 2 | Wildflower Walkabout – What do plants need to grow? (NGSS LS1 Molecules to Organisms)

- Classroom Visit: Plant Growth Factors (1 hour)
- At-home/At-school Learning Activity: Growth Factor Experiment (1 hour)
- Extension Activity: Plant a Wildflower (1 hour)

Day 3 | Fantastic Food Webs – How Matter Cycles in the Environment (NGSS LS2 Ecosystems)

- Classroom Visit: Mapping a Forest Food Web (1 hour)
- At-home/At-school Learning Activity: Owl Pellet Investigation (1 hour)
- Extension Activity: Who Eats What? Wildlife Observations (1 hour)

Day 4 | What On Earth?! – The Four Spheres (NGSS ESS2 Earth's Systems)

- Classroom Visit: Harlow the Heron and the Rainy Day Fish (1 hour)
- At-home/At-school Learning Activity: Make an Earth Spheres Diorama (1 hour)
- Extension Activity: Invent An Earth Systems Superhero! (1 hour)

Day 5 | Jammin' Salmon – Water Quality & Fish Populations (NGSS ESS3 Earth and Human Activity)

- Classroom Visit: Salmon Sightseeing (1 hour)
- At-home/At-school Activity: Salmon in My Bathtub? (1 hour)
- Extension Activity: Takelma Salmon Ceremony (1 hour)

Day 6 | Ammonites & Adaptations – Animal & Plant Adaptations

(MS-LS4 Biological Evolution: Unity and Diversity)

- Classroom Visit: Name That Adaptation! (1 hour)
- At-home/At-school Activity: Fossil ID (1 hour)
- Extension Activity: Neskowin's Ghost Trees (1 hour)

Call 503-779-5227 or email Info@StraubOutdoors.org for more information about our Nature Connections (CDL) and hybrid outdoor school options or visit us online: strauboutdoors.org/outdoor-school.



Learning together in nature!

Who we are.

Straub Outdoors is a nonprofit organization that was founded in 2002 to offer outdoor education for young people. We are inspired by the legacy of Governor Bob Straub and his wife Pat Straub and their advocacy for environmental conservation and social-economic justice, including food sovereignty, and equitable access to green spaces. Oregon's land use laws and the Willamette River Greenway owe much to the Straubs' visionary efforts.



Serving our community.

- We provide place-based science programs for students in kindergarten through Grade 6, including day camps, field trips, and outdoor school, as well as service-learning and leadership opportunities for high school and college students.
- Each year, we collaborate with community-based organizations, companies, agencies, and schools to create inclusive opportunities for children and young adults to learn in nature.
- Our programs take place at dozens of natural areas throughout our state, from the Coast to the Blue Mountains, and from the mighty Columbia to the Rogue Valley. All learning activities promote environmental awareness and land conservation.
- We honor the voices, traditions, and priorities of Indigenous and immigrant people living in this special place now known as Oregon. Our board and staff members reflect the diversity that enriches our state's mosaic of cultures and communities.

"I appreciate the way your educators take the time to know each kid, draw out their strengths, and provide a safe place for exploring and learning."

- Carla Loecke

Meet our Education Team!



Rosie Norlander | Education Team Chair

Rosie graduated from OSU's College of Forestry with a degree in Natural Resource Management and worked as an environmental educator for the New Mexico Museum of Natural History and Science before returning to Oregon to raise her family. She currently teaches at the Montessori Discovery Center in Salem.



Catherine Alexander | Program Administrator

After studying fine art at the University of Oregon and Portland State University, Catherine studied natural science illustration and taught art and ecology programs at the Marie Selby Botanical Gardens in Sarasota, Florida. She has more than two decades of leadership experience in the nonprofit sector.



John Savage | Education Team Senior Adviser

John graduated from OSU in 1979 with a master's degree in Natural Resource Economics and served as the Director of Oregon's Department of Energy. He was later appointed as an Oregon Public Utility Commissioner from 2003-2017. John is also the President of a regional chapter of the Native Plant Society of Oregon.



Sienna Gaskins | Education Team Advisor

Daniel Jimenez | Education Team Advisor

Zoey Chilcote | Educator

Ebb Brister | Educator

Siera Knick | Educator

Tony Rublaitus | Educator



Visit StraubOutdoors.org to learn more about who we are and what we do!

Our Mission:

At Straub Outdoors, our youth programs increase science literacy and foster a holistic understanding of the natural world.

- ▶ **We promote equity and embrace diversity** in our programming and governance.
- ▶ **We support academic success** by introducing science concepts through hands-on, multi-sensory explorations.
- ▶ **We foster collaboration and idea-sharing** in supportive learning environments.
- ▶ **We integrate history and cultural studies**, including the ecological wisdom and Tribal sovereignty of Indigenous peoples.



OUR BOARD OF DIRECTORS:

Sandy Anello

Confederated Tribes of Siletz Indians of Oregon

Beatrice Serrano-Martinez

Adelante Mujeres

John Savage

Public Utility Commissioner (retired)

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Bureau of Land Management (retired)

Sienna Gaskins

Springwater Environmental Sciences School

Daniel Jimenez

Albany Educational Service District

OUR 2023-24 OUTDOOR SCHOOL PARTNERS:



“A strength of the program was the education content, as well as the itinerary. Every minute was well utilized and the kids had a great time!”

- Florence Aguirre, Four Corners Elementary