

New for
2016-17

K-12 FOREST EDUCATION OPPORTUNITIES

A guide to forestry education programs and materials available to you and your students



Oregon Forest
Resources Institute



Why teach your students about forests?

Nearly half our state is covered in forests. Getting students outside the classroom to experience these forests provides a unique, truly Oregon context for teaching and applying core concepts in math, science, social science and literacy.

How do you teach students about Oregon's forests?

This booklet can help. Inside you'll find more than 20 forest-related education programs, field trip destinations and other resources. Most of these programs are free, and bus transportation reimbursements are available for field trips.

Forests provide a wonderful natural

venue to teach Common Core and Next Generation Science Standards. Your students will also become more knowledgeable about an important resource in Oregon. Forests filter our water and absorb carbon from the atmosphere, and they provide wildlife habitat as well as jobs in many rural communities.

Oregon's forests have much to teach your students. It's time to get out there and start exploring!



PROGRAMS FOR TEACHERS

OREGON NATURAL RESOURCES EDUCATION PROGRAM

Statewide

Contact:	Julie Van Hoosen – 541-737-2128 onrep@oregonstate.edu onrep.forestry.oregonstate.edu
Program:	Educator workshops
Grade Level:	K-12 educators (courses also offered through university and college pre-service programs)
Available:	Year-round
Cost:	Most workshops are free
Materials:	Curricula materials and resources provided at no cost
Other:	Substitute reimbursement available and Professional Development Unit certificates provided

The Oregon Natural Resources Education Program at Oregon State University engages educators in learning about Oregon's forests, wildlife and water through professional development workshops that provide strategies and resources for engaging students. The award-winning international environmental education curricula Project Learning Tree and Project WILD are central to most professional workshops and help teachers engage students in learning by providing thought-provoking, field-tested classroom activities that develop critical thinking skills. Topics include ecology, forest history, and forest wildlife and watersheds. Advanced-topic and multiday workshops, as well as summer institutes, provide more in-depth exploration of topics plus tools and strategies for integrated learning.



CLASSROOM PROGRAMS

KEEP OREGON GREEN

Statewide

Contact:	Kristin Babbs – 503-945-7499 Kristin.A.Babbs@oregon.gov keeporegongreen.org kogranger.org
Program:	Interactive website
Grade Level:	2-6
Available:	Year-round
Cost:	Free

The Keep Oregon Green Ranger Program is an interactive, Web-based fire prevention education program for children ages 8 to 12 that encourages parent and teacher involvement. Students discover Oregon's forests, learn about the types of human-caused wildfires that threaten forests, and explore ways they can help prevent wildfires. Individual students, classrooms or entire schools can participate. Upon completion of the program, students are rewarded with a patch and a certificate. Teacher lesson plans and printed activities are also available.

TALK ABOUT TREES

Statewide

Contact:	Joan Mason Ruud – 503-238-7250 info@talkabouttrees.us talkabouttrees.us
Program:	Class presentations
Grade Level:	Preschool-8
Available:	Year-round
Cost:	Free

A Talk About Trees facilitator visits classrooms and uses forest artifacts, displays and hands-on activities to deliver an interactive presentation about forestry and Oregon's forests. Teacher guides and student handouts are available online to prepare for the visit and extend learning. Follow-up paper-making, outdoor and forest-career programs are available. This is a good way to launch a unit on forests or prepare for a field trip.

4-H INTERNATIONAL SUMMER CAMPS

Statewide

Contact: Mario Magaña Álvarez – 541-737-0925
mario.magana@oregonstate.edu
oregon.4h.oregonstate.edu/outreach/4h

Program: Residential summer camps

Grade Level: 6-8

Available: Summer

Cost: \$100; partial scholarships available

The 4-H International Summer Camps expose youth to different environments and new information, and provide opportunities for students to learn about post-secondary education, financial aid and scholarships. The camps enable youth to develop leadership skills and explore careers related to natural resources, engineering, health professions, new technologies, law, music, culture and art. The program also engages youth in fun and challenging educational activities and allows them to interact with role-model university students and professionals.



ALDER CREEK COMMUNITY FOREST

Douglas County

Contact: 541-839-4379, info@aldercreek.org
aldercreek.org

Programs: Field-based STEM learning, geography education, educator workshops, service-learning

Grade Level: K-12

Available: Year-round

Cost: \$1/student visit

Located 1 mile west of Canyonville in southern Douglas County, Alder Creek Community Forest (ACCF) offers a K-12 geography education curriculum, Our Place on Earth, and opportunities for teacher professional development. The curriculum teaches about forests and forestry via interrelated field-based STEM activities, digital skills and geographic concepts. ACCF's 80-acre site includes an open-air pavilion with Wi-Fi and camping opportunities, plus 3.5 miles of signed trails. ACCF has two school coordinators who work with teachers to provide pre- and post-field activities as well as oversight and instruction during field-based learning.

FORESTS TODAY & FOREVER

Lane and Linn counties

Contact: Beth Krisko – 541-767-9078
coordinator@foreststodayandforever.org
foreststodayandforever.org

Programs: Tours, field activities

Grade Level: 4-12

Available: Year-round, by appointment

Cost: Free

Forests Today & Forever brings students to working tree farms to educate them about forest stewardship. Its cornerstone program, Forest Field Days, for grades 6-8, is a cross-curricular package with classroom and field-based learning designed to stimulate critical thinking and creative problem-solving through role-playing. Students make observations about wildlife, soils and water, and learn about the forest as an important resource for timber, wildlife, clean water and recreation. Students use their field observations and experiences to

cooperatively develop their own forest management plans. Programs for other grades are custom-designed based upon teachers' classroom learning objectives, and can include tours, field studies and service-learning opportunities.

HOPKINS DEMONSTRATION FOREST

Oregon City

Contact: Peter Matzka – 503-884-6202
peter.matzka@oregonstate.edu
demonstrationforest.org

Programs: Ecological field studies, tours, service-learning; other experiences customized by arrangement

Grade Level: 1-12

Available: Year-round, by appointment

Cost: Donations appreciated

In this 140-acre family forest dedicated to education, demonstration and research, students examine how forests grow and change under different management strategies. Ongoing demonstrations include wildlife habitat enhancements, selective harvesting, intensive plantation forestry, riparian management and tree-growth research projects. Schools are invited for tours, field studies, service-learning and other experiences customized to their interests and curricular needs.

KLAMATH OUTDOOR SCIENCE SCHOOL

Klamath, Jackson, Josephine and Curry counties

Contact: Bill Hunt – 541-850-8218
billhuntkoss@gmail.com or kossreservations@gmail.com
klamathoutdoorschool.org

Programs: Residential and day camps, in-class presentations, field trips, service-learning

Grade Level: K-12; primarily grades 4 and 8

Available: January to mid-November

Cost: Call for rates and scholarship availability

Klamath Outdoor Science School provides youth with a unique experience in natural settings throughout the southern Oregon region. These programs inspire learning through exploration, discovery and inquiry while enhancing appreciation



for the natural resources of the region. KOSS has a permanent site located about 45 miles north of Klamath Falls in the Sun Pass State Forest, which is managed by the Oregon Department of Forestry. KOSS offers programs at other sites along the coast, in the Rogue Valley and in the desert regions to the east. While at KOSS, students learn forest science and an appreciation for a forest that is well-managed for multiple uses. Curriculum can be provided to educators before and after their stay at KOSS to further enhance learning. Teachers may also borrow, for free, classroom education kits and request a visit from one of the school's naturalists.

MILLER WOODS

Yamhill County

Contact: Larry Ojua – 503-472-6403
yamhillswcd@frontier.com

Programs: Field trips, service-learning

Grade Level: K-12

Available: Year-round

Cost: Varies depending on entity type and size; call for more information

Miller Woods is a unique 130-acre property located 3 miles west of McMinnville. It is owned and operated by Yamhill Soil and Conservation District, and provides a great venue for educators to teach about forestry, wildlife and resource conservation. The property was bequeathed to the district by Frieda Miller in 2004 and is home to oak savannas, timber stands of varying ages, hay fields, two ponds and almost 6 miles of walking trails. The property offers excellent educational opportunities for all ages to experience and enjoy the vibrant wonders of nature while learning about forest management, wildlife, soils, watershed health, native plants and the role of people in the landscape.

MOUNT PISGAH ARBORETUM

Eugene

Contact: Jenny Laxton – 541-747-1504
education@mountpisgaharboretum.org
mountpisgaharboretum.org

Programs: Field trips, self-guided tours

Grade Level: K-5, all levels for self-guided tours

Available: Spring and fall

Cost: \$3.25 per student (teachers and chaperones free)

Mount Pisgah Arboretum is a 209-acre site located along the Coast Fork of the Willamette River, within the Howard Buford Recreation Area, 7 miles from downtown Eugene. The arboretum highlights the native ecosystems of the southern Willamette Valley. Seven miles of groomed trails meander through mixed forest, oak savanna, meadow and riparian areas. Students learn about tree identification, forest ecology, wildlife habitats and other seasonal topics. All programs address the state science standards for elementary grades. Check the website for more information or call to schedule a tour.

NORTHWEST YOUTH CORPS

Statewide

Contact: Jennifer Steimer – 541-349-5055
info@nwyouthcorps.org
nw youthcorps.org

Programs: Residential summer camps; youth and young adult paid Conservation Corps camping programs and Youth Corps community-based day job training and education programs; Twin Rivers Charter School; Laurel Valley Educational Farm's two-acre organic garden

Grade Level: K-5, adult

Available: Year-round

Cost: \$0 to \$400

Established in 1984, Northwest Youth Corps (NYC) engages youth and young adults to improve our region's public and private lands. Through NYC's programs, participants develop critical thinking, teamwork and leadership skills in an outdoor setting. Just as important, NYC helps young people gain a better understanding of modern resource management and related careers. Participants earn a stipend, high school credit, and a solid job reference to become citizen stewards and part of the future workforce.

OREGON 4-H OUTREACH LEADERSHIP INSTITUTE

Statewide

Contact: Mario Magaña Álvarez – 541-737-0925
mario.magana@oregonstate.edu
extension.oregonstate.edu/4h-outreach/
summer-camp

Program: Residential summer camps

Grade Level: 9-12

Available: Year-round

Cost: Call or check the website for information

The Oregon 4-H Outreach Leadership Institute prepares students for college and helps them explore different career options, develop leadership skills and conduct community service. The institute provides hands-on workshops and motivational speakers for students to learn about post-secondary education and how to apply for college and financial aid. The program explores careers related to natural resources, among other professions. Participants develop leadership skills while engaging in fun and challenging educational activities. They can also earn community service hours by serving as camp counselors during the 4-H International Summer Camps.

OREGON ENVIROTHON

Statewide

Contact: Julie Woodward – 503-807-1614
woodward@ofri.org
oregonenvirothon.org
LearnForests.org

Programs: One-day science/natural resources competition, field trip, teacher workshop

Grade Level: High school

Available: Year-round (competition in May)

Cost: Free

Teams of five students each participate in this hands-on environmental problem-solving competition. Teams complete training and testing in five categories – aquatic ecology, forest ecology, wildlife ecology, soils and land use – and one current environmental issue. Winning teams may advance to the North American Envirothon event and compete for recognition, scholarships and prizes. Professional development for instructors, student



field trips, training sessions and study equipment are available to prepare teams for the competition.

OREGON GARDEN NATURAL RESOURCES EDUCATION PROGRAM

Silverton

Contact: Rikki Heath – 503-799-4792
 heath@ofri.org
 oregongarden.org/programs/education
 LearnForests.org

Programs: Field trips, educator workshops, service-learning, special events

Grade Level: 4-6

Available: Year-round

Cost: Free

The Oregon Garden Natural Resources Education Program is a collaboration between The Oregon Garden and OFRI. The program's goal is to help students understand how natural resources contribute to quality of life by using wetland habitat and the Rediscovery Forest – both amazing, hands-on places for learning. Students participate in programs focused on forest health, plant and animal adaptation, the food web, wildlife habitat and much more. Visit the OFRI website for information on a variety of interactive, grade-appropriate, science-based programs, and to register. Registration is only available online. OFRI also offers several educational events and educator workshops at the Rediscovery Forest throughout the year.

PORT BLAKELY TREE FARMS

Molalla

Contact: Bonny Glendenning – 503-720-9794
 bglendenning@portblakely.com
 portblakely.com (link to Environmental Education website with teacher information)

Programs: Field trips, in-class presentations

Grade Level: 3-6

Available: School year

Cost: Free

Port Blakely offers an interactive forestry experience in which students play games, complete hands-on activities and learn in a fun, fast-paced environment as they traverse an ADA-accessible trail. The tour site features forests of various ages, as well as a riparian area where students learn about trees, wildlife, water, recycling, climate change and forestry.

ROCK-ED OUTDOOR EDUCATION CENTER

Douglas County

Contact: Dan Meyer – 541-496-3484
 dan.h.meyer@state.or.us

Programs: Field trips, self-guided tours

Grade Level: K-12

Available: Year-round

Cost: Free

ROCK-ED Outdoor Education Center is a natural resources education facility located 22 miles east of Roseburg at the Oregon Department of Fish and Wildlife's Rock Creek Hatchery. Constructed as a cooperative nonprofit project through the Joe Merchep Umpqua River Foundation, the 1,300-square-foot, one-room schoolhouse features a large classroom, a display area, a 200-gallon fish tank and a covered deck overlooking a pond. A half-mile trail starts at hatchery rearing ponds and takes visitors into forest and along nearby Rock Creek. Reservations for use of the classroom and arrangements for tours should be made in advance. The hatchery facility, gathering place and trail are open to the public from 7:30 a.m. to dusk every day.

STARKER FORESTS

Corvallis

Contact: Jennifer Beathe – 541-929-2477
Jennifer@starkerforests.com
starkerforests.com

Program: Field trips

Grade Level: K-12

Available: Year-round, by appointment

Cost: Free

Starker Forests is a fifth-generation, family-owned business that began in 1936, when T.J. Starker purchased cut-over forestlands. Today, Starker Forests actively manages more than 87,000 acres of forestland for timber production. The company encourages forestry education and offers classroom curricula. The Starker Forestry Trail is available for half-day and all-day field trips; a forester leads school groups on these trail tours. The Starker family encourages recreational use of their lands with a free permit and offers custom tours by appointment. The interpretive trail near Blodgett is open all year for self-guided tours. A brochure with directions to the trail is available at the Starker Forests office and describes stops along the trail.

TILLAMOOK FOREST CENTER

Tillamook County

Contact: Oregon Department of Forestry
503-815-6800
tfcinfo@oregon.gov
Register online at
tillamookforestcenter.org

Programs: Field trips, educator workshops, materials for Boy Scouts and Girl Scouts

Grade Level: K-12

Available: March-November

Cost: Fees for organized groups will begin in 2017

The Tillamook Forest Center, located in the heart of the Tillamook State Forest on Highway 6 about one hour west of Portland, offers educational programs, hands-on exhibits and field-trip opportunities. It's fun and fully accessible. Programs examine the natural and cultural history, as well as the stewardship, of the Tillamook State Forest. All programs include pre- and post-activity suggestions, are correlated to state education requirements and

require registration. The center is open March through November. Please check the website for hours and days of operation.



TRYON CREEK STATE PARK

Portland

Contact: Erin Cathcart – 503-636-4398
erin@tryonfriends.org
tryonfriends.org

Program: Field trips

Grade Level: K-5

Available: Year-round

Cost: Half-day (2 hours) – \$6 per student, Full-day (4 hours) – \$10 per student

The Friends of Tryon Creek State Park offer hands-on, experiential field trips designed to facilitate student-driven exploration of basic concepts in science and natural history in a southwest Portland urban forest. Full- and half-day programs for preschool through fifth grade are offered, and focus on topics from animal adaptations and sensory exploration to watersheds and forest succession. Students spend time outdoors (rain or shine) in small groups with a trained volunteer nature guide, making connections to key concepts through group collaboration, hands-on activities and direct observations. All field trips are connected to state and national science standards and are designed to promote critical thinking, develop problem-solving skills and foster positive relationships with the natural world. Pre-registration for field trips is required.

TUALATIN RIVER NATIONAL WILDLIFE REFUGE

Sherwood

Contact: Seth Winkelhake – 503-625-5944
Seth_Winkelhake@friendsoftualatinrefuge.org
fws.gov/refuge/tualatin_river

Program: Field trips

Grade Level: 4-6

Available: Year-round

Cost: Free

Tualatin River National Wildlife Refuge is an urban refuge located close to a metropolitan area that uses comprehensive, integrated, hands-on educational methods. Field trip activities are designed to mesh with teachers' objectives, and trained volunteer naturalists lead many nature-themed field trips, including the Forest Ecology Field Trip. Naturalists teach students about riparian forests and associated interactions with wildlife. The Forest Ecology Field Trip explores seasonality and changes in the forest throughout the year, and the science of maintaining a healthy forest. This trip is aligned with the Oregon Forest Literacy Plan. Check out the Rhythms of the Refuge online guide for educators for pre- and post-visit activities.

TUALATIN RIVERKEEPERS

Tigard

Contact: Charissa Jones – 503-218-2580
charissa@tualatinriverkeepers.org
TualatinRiverkeepers.org/field-trip

Program: Field trips

Grade Level: K-8

Available: Sept. 15-Nov. 15 and April 1-June 15

Cost: Free for Title I schools; suggested \$5 per group for all other programs

The Tualatin Riverkeepers Nature Awareness program is designed to help students in the Tualatin River Watershed learn techniques to understand and enjoy the nature in their neighborhood. Field trips take place at Dirksen Park, a 48-acre urban nature park that hosts a variety of habitats, including riparian forests, wetlands, oak savanna, and a diversity of native plant and animal species. On the three-hour field trip, volunteer naturalists teach students about forest ecology during small-

group activities designed to meet Next Generation Science Standards and the Oregon Environmental Literacy Plan.

WOOD MAGIC

Corvallis

Contact: Jeff Morrell – 541-737-4222
woodscience.oregonstate.edu/oregon-wood-magic

Program: Field trips

Grade Level: 3-4

Available: Fall

Cost: Free

Wood Magic is a fun and lively interactive program designed for elementary school students to learn about the wonders of wood – a material that is basic to human well-being. The three-hour experience moves students and their teachers through a series of nine stations that examine various woods and wood-products technologies. Teachers receive a series of lesson plans related to these stations for use in the classroom before and after the trip.



Resources for teachers and students

OREGON FOREST LITERACY PLAN

Contact: Norie Dimeo-Ediger – 971-673-2956
dimeo-ediger@ofri.org
LearnForests.org

Program: In-class resources

Grade Level: K-12

Available: Year-round

Cost: Free

The 24-page booklet provides educators with a conceptual framework for teaching about Oregon's forests that aligns with the latest state curriculum standards for math, science, social science and literacy. The framework is organized around answering four main questions:

- What is a forest?
- Why are forests important?
- How do we sustain our forests?
- What is our responsibility to Oregon's forests?



The plan's built-in flexibility makes it useful for a wide range of applications to increase forest literacy, including classroom instruction, informal education and curriculum materials on forest topics. It includes examples of grade-appropriate activities related to forests. These can be used to teach and reinforce concepts detailed in the conceptual framework, as well as to connect students to the natural world. The concepts were developed by a statewide stakeholder group and are correlated with the Oregon content standards, along with the educational materials and classroom activities highlighted in the plan.

Visit our updated LearnForests.org website to order or download a copy of the Oregon Forest Literacy Plan.

BOOKS, GUIDES, VIDEOS AND POSTERS

Contact: LearnForests.org
info@ofri.org

Program: In-class resources

Grade Level: K-12

Available: Year-round

Cost: Free

A broad array of K-12 publications supplements OFRI's forest education programs, offering teachers handy references and detailed guides to help students better understand Oregon forests. Through full-color illustrations and age-appropriate text, OFRI's educational materials reveal both basic and fascinating facts about forests, wildlife, plants, habitats and scientific research. Teachers can use these publications, designed for different age groups, to enhance courses involving natural resources curricula.

A teacher sampler is a great way to receive an overview of OFRI's K-12 education materials. Folder contents vary between the teacher sampler for grades K-5 and the teacher sampler for grades 6-12, so the folder may include the following publications (check website for specifics):

- Forest Fact Breaks: Animations for the classroom
- *Find Your Path* – It just might lead to a rewarding forest career
- A complete set of all fact sheets
- *K-12 Forest Education Opportunities*
- *Oregon Forest Facts & Figures*
- *Sounds of the Forest*
- Forests of Oregon (poster)
- *Oregon Forest Literacy Plan*
- Carbon cycle (poster)
- Forest activity sheet
- *Into the Forest* and accompanying teacher guide
- *Explore the Forest* and accompanying teacher guide

To order these free publications from the OFRI K-12 website, visit LearnForests.org.

Career education resources

As students are introduced to career education, teachers should know that about one in every 20 Oregon jobs is in what economists call the “forest sector.” The forest sector includes a wide variety of jobs: from planting trees to harvesting them; from driving a truck to fighting fires; from studying fish and wildlife to planning the sustainable use of forestland; from engineering roads and new types of wood products to buying and selling timberland.

OFRI’s *Find Your Path* booklet and growing collection of online videos profile more than 20 people who work in forest-related jobs in Oregon. Students will learn what these workers do, how they got where they are and what skills they needed. Find these resources at OregonForestCareers.org.



RESOURCES





The Oregon Legislature created the Oregon Forest Resources Institute in 1991 to advance public understanding of how forest stewardship meets the social, environmental and economic needs of both present and future generations.

OFRI works closely with the scientific, academic and educational communities at Oregon State University, the Oregon Department of Forestry and other agencies to ensure its K-12 resources are accurate and objective.



**Oregon Forest
Resources Institute**

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