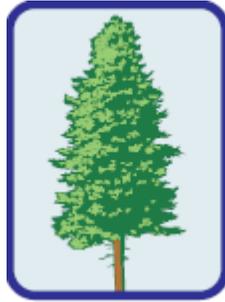


**Girls Scouts
Western Rivers Council**



**Forestry Interest Project Patch
Cadette and Senior**

This badge design is a Douglas Fir. It is a large conifer 100-250 feet tall predominant in western Oregon and common east of the Cascades, especially at mid-to-high elevations. Common uses are: structural products such as lumber, beams, trusses and flooring, plus veneer, plywood, paper pulp and some chemicals.

Humans have always depended upon forests. Forests have provided food, fuel, shelter, and many other resources. They have been worshipped, feared, bought and sold, protected, destroyed, and restored. Forested lands are deeply woven into our myths and legends, music, literature and art. Without forest, our existence would be far less rich. In fact, without forest, we would find it difficult to survive at all.

Today, the forests of the world continue to be among the most interesting and important natural resources on the planet. Nearly 30 percent of the world's land is forested, and a third of the acreage of North America is covered with forests. These great stands of vegetation shield Earth from the forces of wind, rain, and sunlight. They slow erosion, enrich the soil, protect bodies of water, and provide shelter for wildlife. Forests are home to plant and animal species that, in many cases, we have yet to fully understand.

You might not spend much time thinking about the products that come from forest, but they are vital to our way of life. Your home probably has lumber in it that was milled from trees harvested right here in Oregon. Much of the furniture in your house is made of wood, and so is the paper used to print this packet. Many foods and prescription drugs have forest origins. If you wrote down all the forest products you use, the list would be very long.

Forests provide jobs, too. Some people manage timberlands and harvest trees and other forest resources. The wood-products industry is a key industry in Oregon. The outdoor recreation industry creates many jobs as well.

With so many pressures upon forests, we have the responsibility to be good stewards to endure that forests are healthy today and that we can pass them on to future generations in as good or better condition that we found them. This is the goal of modern forestry. To accomplish it, we need to understand as much as we can about forests and how to use and enjoy them without causing harm.

Many of the interest project requirements listed below can be completed by visiting one of the locations listed in the publications *Opportunities for Rediscovering Oregon's Forests* (available 1 per troop while supplies last) or you can order additional copies free of charge from www.oregonforests.org and **Teacher's Guide to Forest Education Opportunities*.

Resources shown with an * are available for free at www.oregonforests.org; or 1-800-719-9195.

Record your findings in a field notebook.

To earn this patch you must complete 2 skill builders, one technology, one career exploration and two additional ones from any of the categories.

Skill Builders

1. Most trees in Oregon are classified in the Coniferous or Broadleaf Deciduous families. Coniferous trees have cones, needles and are evergreen. Broadleaf deciduous trees have flowers, leaves and the leaves change color and fall from the tree. Using a dichotomous key, identify five Coniferous and five Broadleaf deciduous trees. If possible, collect samples and keep them in a field notebook.

Broadleaf Evergreen is another tree family. Madrone, Holly and Myrtlewood are three Broadleaf Evergreens that grow in Oregon. Find a sample to include in your field notebook or look up on the internet.

Resource: Online tree guide – <http://oregonstate.edu/tree/index.html> or use a Pacific Northwest Tree Guide.

2. Trees are living systems. What do trees need to live and how do they grow? How do trees get food and water? Learn about the different tree parts (roots, outer bark, phloem, cambium, sapwood and heartwood). In your field notebook, draw a cross section of a tree and mark location of each part.

Resource: Project Learning Tree *Environmental Education Activity Guide*, activity 41, or www.arboday.org/trees.

3. How has the suppression of fire affected Oregon's forests? What have we learned and how are we managing our forests now to reduce the impact of fires on our forest land.

Resources: Forest Fact Book –at www.oregonforests.org/factbook; * *Severe Fires: What Can Be Done About Them?*

4. Insects and disease can destroy a forest. Learn about a forest or tree that has been harmed by an insect or disease. Describe what happened, why and what can be done to prevent further harm.

Resource: Project Learning Tree *Environmental Education Activity Guide*, pages 63-64; or visit the Forest Health Protection Pacific NW Region USDA Forest Service website at www.fs.fed.us/r6/nr.

5. Why do the different animals in Oregon's forest choose to live where they do?

Resources: * *A Guide to Oregon's Forest Wildlife* (1 per troop while supplies last).

6. In 1971, Oregon became the first state to enact laws governing the practice of forestry. The Oregon Forest Practices Act (OFPA) sets standards for any harvesting of trees and most forest-related management operations on Oregon forestland both private and public. Why did Oregon develop the OFPA? What resources are being protected by this law?

Resources: Forest Fact Book – online at www.oregonforests.org/factbook;
* *Protecting Oregon's Forests* and * *Oregon's Forest Protection Laws*.

7. Learn about the different forest types in Oregon. What kind of trees grow in each forest type? What forest type do you live near?

Resource: Forest Fact Book – online at www.oregonforests.org/factbook.

8. With a knowledgeable individual, visit a public or private forest. How is the forest being managed? Has the timber been harvested? What harvest method was used and why? What kind of trees were replanted and why?

Technology

1. Products are derived from all parts of a tree. We use over 5000 products a day that are made with wood or wood byproducts. Wood is the most obvious. It provides things such as lumber for housing, furniture, doors, floors and much

more. Learn about the many ingredients we get from trees and how they are used to make a multitude of products from adhesives to wood stains.

Resources: Project Learning Tree *Environmental Education Activity Guide*, activity 13; *Forest Fact Book* – online at www.oregonforests.org/factbook; Chemicals and Products from Trees (included in this packet or www.idahoforests.org/plans.htm).

2. Laser technology is providing foresters with new tools to do their job faster and more accurate. Watch the Laser Inc Technology CD and read the brochure to see how it works. CD and brochure included in this packet or visit their website www.lasertech.com/innovate.

3. Like most scientists, the people who study forest ecosystems rely on scientific equipment to make meaningful measurements of forest processes. Do a web search, contact a forest scientist or ask a science teacher to help you learn about the types of equipment used to monitor forests.

Service Projects

1. Become involved with a community organization that supports urban or rural forests (nature centers, public parks, arboretums, your local Girl Scouts, etc.). Volunteer to help plant trees or maintain forests during workdays or help with a public event.

2. Offer your services to a troop of younger Girl Scouts. Share your knowledge of forestry while helping them earn their Forestry Try-It or Forestry Badge.

Career Exploration

1. Interview by phone, email or in person someone who works in forests. This could be a forest logger, ranger, manager, scientists, etc. Ask him/her about his/her job and the specific duties for which he or she is responsible.

2. Visit the Oregon State University College of Forestry website at www.forestry.oregonstate.edu. Read about the seven undergraduate majors. Learn about the kind of job opportunities available to graduates.

Resource: OSU College of Forestry fliers included in packet while supplies last.

3. Read the brochure * *Oregon's Forestry Professionals*. Which job interests you the most and why?