Ecosystems Olympic

Program introduces students to the three, main, ecosystems of Olympic National Park. Using the basic components of ecosystems as the conceptual framework, education rangers from Olympic National Park guide students though a classroom based exploration of the park. Program is designed to be interactive, to engage multiple learning styles, as well as reinforce key academic vocabulary. Program duration is 1.5 hours and is targeted for a 4th grade audience. Follow up visits to the ONPVC provide additional opportunities to experience the park as well as expand understandings concerning ecosystems.

**Activities**:In class program (powerpoint and hands-on) and optional park follow up visit.

**Theme:** Olympic National Park is a treasure chest of ecosystems where abiotic factors influence the biotic diversity in observable ways.

**Goals:** At the end of the program students will…

1. Know the three main ecosystems of Olympic National Park
2. Understand the components of an ecosystem and how biotic communities (outputs) are influenced by the abiotic factors (inputs).
3. Understand how the Park Service protects the ecosystems of Olympic
4. Know that science starts with making observations and formulating questions

**Objectives**: At the end of the program students will…

1. Describe at least two main ecosystems within the Park
2. List 5 species and their associated ecosystem as well as a describe an interesting fact about each
3. Describe a scientific project in ONP and it importance
4. Interpret ways they can help protect Olympic National Park
5. Identify the park service arrowhead and significance of the objects within

**State Standards (EALRS 4th Grade Science)**

**Systems**

* SYSB - A *system* can do things that none of its *subsystems* can do by themselves.
* SYSC- Systems have [*input*](http://standards.ospi.k12.wa.us/GlossaryPopup.aspx?subject=10&word='Input')*s* and [*output*](http://standards.ospi.k12.wa.us/GlossaryPopup.aspx?subject=10&word='Output')*s*. Changes in *inputs* may change the *outputs* of a *system*.

**Application**

* APPCProblems of moderate complexity can be solved using the *technological* [*design*](http://standards.ospi.k12.wa.us/GlossaryPopup.aspx?subject=10&word='Design') *process*. This process begins by defining and researching the problem to be solved.

**Life** **Science**

* LS1BPlants and animals have different structures and behaviors that serve different [function](http://standards.ospi.k12.wa.us/GlossaryPopup.aspx?subject=10&word='Function')s.

Program Breakdown

 15 Minutes – Park Service Overview

 15 Minutes – What is an ecosystem?

 10 Minutes – Magic mystery boxes

 40 Minutes – Photo Tour

 10 Minutes – Ecosystem Olympic Challenge and summary