Ohanapecosh Quest #1: Ancient Wonder
Old Growth Forest Quest

Introduction: Old Growth Forest makes up about 60% of Mount Rainier National park. What makes old growth forest unique? In this quest you will search for and photograph some of the unique characteristics of this amazing ecosystem. Your quest takes place on trails in the Ohanapecosh area that lead you to great examples of this special type of forest.

Length: about 1 hour

Guidelines/Background: Quests can be completed by individuals or families/small groups. Have your Citizen Ranger certificate stamped and initialed for each Quest you complete. Get your certificate after completing your first Quest. Complete four Quests to become a Mount Rainier Citizen Ranger and receive a unique patch. Ask a ranger at the information desk if you need help!

Level of Difficulty: Recommended for ages 12 through adult. Younger children may be able to complete with assistance.

Materials Needed: pen or pencil, a digital camera (with screen) or smartphone (with camera). Optional: a field guide (check with ranger for availability).

Safety: Use caution around the Ohanapecosh River. Do not get too close. The cold, fast-moving river has claimed many lives. Children should be accompanied by an adult.

Below are descriptions of characteristics and components of old growth forests in western Washington. Use the Ohanapecosh area trails (Silver Falls loop, Grove of the Patriarchs, Three Lakes) and your digital camera/smartphone to find and photograph each of the listed characteristics or components. Answer the related questions in the spaces provided below. Return to the visitor center and share your photographs and answers with the ranger at the information desk.

1. Diversity of tree species (different types of species) is one unique characteristic of old growth forest. Several different tree species are found in the Ohanapecosh area. Take a single picture that contains at least three different tree species in the same shot. Then, answer the following question: How might having diversity of species of trees in a forest lead to diversity of animal species?

2. Old growth forest contains different sizes and ages of trees. This results in a "multi-storied canopy" (tops of trees are at different heights). Photograph an area that has a multi-storied canopy. Then, brainstorm an answer to the following question: How might a multi-storied canopy help an animal survive?

3. Compared to a young forest or a tree farm, old growth forest contains lots of dead trees. Both standing dead trees (snags) and downed decaying trees are abundant in old growth forest. Take a photograph that shows both a downed dead tree and a standing dead snag in the same shot. Observe several dead trees. Then, brainstorm answers to the following question: What might be some living things that use dead trees to help them survive?

4. Conditions of light, temperature, and moisture are often different in old growth forests as compared to conditions in other types of forests. Find and photograph a place in the forest that seems wetter, dryer, hotter, or colder the most others. Why do you think the place you chose is wetter, dryer, hotter, or colder than most other places nearby?

5. Interconnections result from the unique conditions and characteristics of the old growth forest. Find and photograph at least two of the following interconnections found in old growth forest:

   a. A young tree growing on a downed, dead tree.
   b. A young tree growing in an opening in the forest (opening was created by an old tree falling over).
   c. A natural disturbance (fire, flood, landslide/avalanche, river migration) that created an area where pioneer deciduous (leafed) trees are growing.
   d. A fungi (mushroom) growing out of a dead tree.
   e. A plant growing on top of another plant.
   f. Another interconnection not listed above.

6. Final QUESTion: Describe old growth forest in your own words to the ranger at the desk in the visitor center.

Have the Park Ranger at the desk check your pictures and answers and sign in the space below.

Ranger verifying completion:_____
                                                        signature   date