Plant Scavenger Hunt

In this lab you will practice identifying native and invasive plants. You will also identify adaptations, or characteristics of plants help them survive. Record the results of your scavenger hunt in your nature journal. Take time with the plants as you identify and draw them. It does not matter if you feel like an artist or not, what matters is that you spend time becoming familiar looking at plants. You can draw the whole plant, or just part of it. Focus on what will help you identify the plant when you see it again. Make sure that your name is on the front of your nature journal.

Glossary

Adaptation: any alteration in the structure or function of an organism, or any of its parts that results from natural selection and by which the organism becomes better fitted to survive and reproduce in its environment

Aquatic: aquatic organisms live primarily in water. Can be fresh or salt, flowing or still. Aquatic organisms have a variety of adaptations to help them live in the water.

Seed dispersal: the movement of seeds away from the parent plant. Since seeds are not mobile they have different methods of dispersal through the environment around them. The structure of a seed may tell us something about how it is dispersed.

Ethnobotany: the study of a region's plants and their practical uses through the traditional knowledge of a local culture and people.

Herbivore: an animal that eats plants.

Invasive plant: a plant that does not naturally occur in an environment, and whose adaptations allow it to outcompete, and replace, native plants.

Landscape: part of the Earths surface that can be viewed at one time from one place. It consists of the geographic and biologic features that mark, or are characteristic of, a particular area.

Native plant: A plant species that normally lives and thrives in a particular ecosystem. This includes any species that developed with the surrounding habitat.

Photosynthesis: the cellular process by which plants turn sunlight into energy. Plants that photosynthesize have cells called chloroplast. Oxygen in a byproduct of photosysnthesis.

Pollinate: the transfer of pollen to a stigma, ovule, flower, or plant to allow fertilization and reproduction.

Trait: a trait is a characteristic or feature of an organism. For example, a trait that birds possess is a beak, and looking at the beak shape of a bird helps us determine what the bird eats.

Plant Scavenger Hunt

1. Cover Page

Divide your cover page into 4 quadrants by drawing an X across the page. The center of the page represents where you are sitting. In each of the four quadrants draw what you see: in front of you, to your left, to your right, behind you. These can be quick sketches of the **landscape** you are in, or a close of something near you.

2. Native Plants

Use two pages of your nature journal. Identify two **native plants** using any of the resources available to you. Draw and label each of these plants in your nature journal. Using Pojar & MacKinnon's *Plants of the Pacific Northwest Coast* record the traditional **ethnobotanical** uses of these plants.

3. Invasive Plants

Use one page of your nature journal. Identify an **invasive plant** using any of the resources available to you. Draw a picture of the plant in your nature journal. List some **adaptations** this plant has that allows it to outcompete native plants.

4. Water Adaptations

Use one page of your nature journal. Find, and do your best to identify, an **aquatic** plant. Draw a picture of this plant and list some of the ways in which it has adapted to live in the water. Describe some of the plant **traits** that are different than plants that live on land.

5. Photosynthesis

Use one page of your nature journal. Find a plant that is adapted to **photosynthesize** year round. Draw a picture and identify the plant. Answer in your nature journal: how is this plant different than plants that photosynthesize for only part of the year?

6. Defense

Use one page of your nature journal. Find a plant that has an adaptation to protect it from **herbivores**. Draw and identify the plant. Answer in your nature journal: how does this plant protect itself from herbivores?

7. Pollination/Seed dispersal

Use one page of your nature journal. Find, and do your best to identify, a flower or seed. Draw in your nature journal. If you found a seed guess at how it gets **dispersed** and list what traits make you think this. If you found a flower make a guess about the type of **pollinator** that visits the flower. You do not need to know the exact type of pollinator, just take a guess at what it looks like.