

What is an ecosystem?

An **ecosystem** is made up of all living things (plants and animals) that interact with each other and their non-living environment (soil, water, air). This interaction occurs over time in a distinct area and is driven by the energy of the sun. Ecosystems can be as large as the planet Earth, contained within a downed log or as small as in a puddle.

How do you **know it is an Old Growth Forest** ecosystem?

- There are big, old (more than 120-250 years) living trees.
- You see many different types of trees that vary in size and space.
- You see large dead, dying or broken trees, some uprooted.
- Rotting logs and lots of moist woody debris are on the forest floor.
- Openings or gaps in the forest's covering allow you to see different tree top heights.
- In open sunny gaps you see shrubs, saplings and young trees growing.
- There are few signs of human activities or disturbances.

Here are some **examples of living things** in an Old Growth Forest ecosystem.

- Plants (Producers) – ferns, mosses, devils club, lichen, bunchberry, falsebox, devil's club, Western red cedar, Western hemlock, Western larch, Douglas fir, Engelmann spruce, Western yew
- Animals (Consumers) – winter wren, pileated woodpecker, barred owl, northern flying squirrel, salamander, slugs, carpenter ants, wood louse, millipede
- Decomposers – bracket fungus, mushrooms

The **major threats** to Old Growth Forest ecosystems in the Columbia Basin are:

- Logging old growth forests faster than trees can grow back to that size.
- Replanting once old growth forest species with a different type of tree that is not natural.
- Forest fires caused by natural and/or human disturbances.
- Diseases and/or insects taking over.
- Human activities such as farming, road building and growing cities.

What can you do to help?

- Do not buy old growth forest products.
- Learn more about old growth forest ecosystems.
- Support the protection of and visit old growth forest ecosystems in your community. Here are some locations in the Columbia Basin: Cedar Valley Old Growth Reserve (Island Lake), Morrissey Cottonwoods, Old Growth Cedars in Glacier/Revelstoke National Park, Giant Cedars near Golden up Big Bend Highway, Retalich between Kaslo and New Denver, Merry Creek near Castlegar, Summit Creek on Hwy, 3 west of Creston or Kinney Lake Trail in Mt. Robson Provincial Park.

