

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 puddle.

How do we **know it is a Grasslands** ecosystem?

- There are more grasses than any other type of plant species. For example: bluebunch wheatgrass, rough fescue, and Idaho fescue.
- There are very few to no small Douglas-fir trees.
- Areas of bare soil patches are covered by lichen and low growing plants like moss and kinnickinik.
- There are no bad weeds like knapweed, St. John's wort, sulfur cinquefoil, ox-eye daisy and toadflax.
- Small amounts of weedy species like dandelion, foxtail barley and black clover.
- Regular occurring fires every 5-15 years as a natural disturbance to recycle nutrients and kill species that will take over a grassland like Douglas-fir trees.
- The area is relatively dry. If it is too wet it can become a forest; too dry and a desert will exist.

Here are some **examples of living things** in a Grasslands ecosystem.

- Plants (Producers)– grasses, kinnikinnick, yarrow, prairie crocs, three pronged aven
- Animals (Consumers) – western toad, golden eagle, Columbian ground squirrel, white-tailed deer, rocky mountain elk
- Decomposers – fungus, cryptogamic crust

The **major threats** to a Grasslands ecosystem include:

- **Human developments** such as crops, vineyards, golf courses, highways, pastures, urban housing developments and gravel pits are taking the place of grasslands.
- Farming practices like overgrazing, depletion of soil nutrients and over-exposure of soil.
- The **control and absence of wildfires** has allowed forests to take over many grasslands.
- **Off-road and four-wheel drive vehicles** like dirt bikes, 4X4's, and ATV's tearing up the vegetation which increases soil loss and compression.
- **Invasion of noxious weeds** that have no insect predators or plant pathogens to keep the plant in check.

What can you do to help?

- Stay on the trails and walk lightly in a grassland.
- Support controlled, prescribed burns conducted by professional fire fighters.
- Control noxious weeds in your community.
- Drive vehicles on the right roads and keep all motorized vehicles off grasslands.
- If your home is located in a historical grassland area, think of replanting your backyard with native grassland species.
- Learn more about grasslands.

