

wildsight – Student Backgrounder

Wetland Ecosystem

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 a Wetland** ecosystem?

- The area has been wet for all or part of the year.
- The land is flat and water moves slowly or not at all.
- Anaerobic soil (soil that does not have oxygen) can be found here.
- Minerals are trapped in the poorly drained soil.
- Typical animals live there that are associated with wetlands – moose, beaver, ducks, great blue heron, muskrat, etc.
- Water tolerant plant species grow in large amounts – these plants don't mind wet feet!

Here are some **examples of living things** in a Wetland ecosystem:

- Plants (Producers) – cattails, bulrushes, sedges, horsetail, willow, birch, dogwood, cottonwood, spruce trees.
- Insects/Invertebrates (Consumers) – leeches, mayflies, mosquitoes, dragonflies, water striders
- Vertebrate Animals (Consumers) – trout, Western painted turtle, garter snake, spotted frog, mallard duck, red-winged blackbird, great-blue heron, beaver, muskrat, moose
- Decomposers – bacteria, fungus

Wetlands work in wonderful ways. They act as:

1. **Flood busters** – plants act like sponges soaking up water to prevent floods and slowly squeeze it back into rivers and streams
2. **Filters for dirt and silt** – by slowing down the runoff of water, dirt settles out and clean, clear water enters waterways.
3. **Resting area** for migrating waterfowl.
4. **Recreation area** for picnics, hiking, fishing, swimming, and bird watching.
5. **A Natural clean up crew** – micro organisms in plant roots break down harmful chemicals into less harmful forms and as they work cleaning the water, they release that gassy telltale wetland aroma.

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

- The building of reservoirs that cause permanent flooding in areas
- The building of dikes and channels that redirect water ways
- The development of roads, rail lines and power lines that disturb and replace wetlands
- Human developments like growing cities, farming and roads are filling, draining and polluting wetlands that are in and near towns and cities



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- Noxious weeds like Purple Loosestrife is very damaging and can produce thousands of seeds that take over wetland areas and stop natural species from growing, which is required by native animals

What can you do to help?

- Visit, enjoy and support the protection of wetlands in your community
- Be sure not to dump pollutants down the drain eg. paints, oils, chemicals
- Use non-motorized watercrafts near and around wildlife so you don't scare them or cause a boat wake to flood their nest
- Watch wetland wildlife with your eyes not your hands. Do not collect or catch wetland animals like frogs, snakes or turtles and practice catch and release fishing.



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