

Grade 3 Social Studies: October 5 – October 9, 2020

Lesson Focus: Living things are diverse, can be grouped, and interact in their ecosystems.

Materials:

- Internet access for videos
- Notebook, pencil

Invitation to Learn: You will be gathering evidence and interpreting information to understand how ecosystems work and why they might be important to life.

Watch and read the following. Be ready to discuss what you have learned.

- [Environment: Ecosystems Around Us](#)
- [Ecosystems: What is it?](#)

Ask/Discuss:

What do you now know about “ecosystems”?

What interesting things popped up in the videos that made you stop and think?

What ecosystems can you identify?

More to Read:

An ecosystem is a community of interacting organisms and their environment.



Many people only think of animals when they learn of ecosystems. In reality, an ecosystem has animals, plants, and **NON-living** things too. Animals need to hide inside rocks and dead trees. Water is needed to drink and some animals live in the water. Air is a non-living part of an ecosystem as well — all animals need air.

Some ecosystems provide special services for the entire world. For example, even though rainforests only cover 6% of Earth, they produce about 40% of the oxygen in the atmosphere through photosynthesis. Other ecosystems produce food, medicine, and helpful materials like rubber and lumber.

Organisms only survive in an ecosystem when their specific needs are met.



All organisms have needs, such as food, water, and air. If the needs of the organisms in the ecosystem are not met, they cannot survive.

Animals usually need food, water, and shelter. For example: if deer need to eat grass and the place they live in (their ecosystem) no longer has grass, they have to move somewhere else or risk not surviving.

A healthy ecosystem has many different kinds of organisms.



When you think of an ecosystem, such as a forest, there are many organisms that are important. Trees, deer, plants, birds, squirrels, and insects are prominent members of the ecosystem. There are many more organisms that live in an ecosystem that are not as noticeable.

We often forget about all the bacteria, fungus, and tiny insects that are equally important. Ecosystems depend on many organisms to keep them in balance.

When that balance is disrupted organisms cannot thrive, and some may even die. Possible disruptions caused by humans include pollution, deforestation, land development, or removing too many resources like water. Making wise choices to protect ecosystems will help all the living things continue to live and thrive. It's important to remember that not all disruptions are caused by humans, some happen naturally.

Newly introduced organisms can throw off the balance of an ecosystem.



Another way humans impact ecosystems is by introducing invasive species. *Invasive species* are living things not naturally found in that ecosystem.

They upset the natural balance. Wild pigs were introduced to British Columbia a long time ago. Each year they cause billions of dollars of damage to crops. Wild pigs eat turkey eggs and other animals. Since they are no longer in their native environment, wild pigs do not have any natural predators, so their population is difficult to control.

In nature, an ecosystem is balanced with predator-prey relationships that keep populations from getting too high.

When invasive species are introduced three possible things can happen to existing animals. (1) The animals can adapt and stay in that ecosystem. (2) The existing animals die or (3) the animals can move somewhere else to find a new home.

Notebook Time: (Answer in your notebook)

Ecosystem have Living and Non-Living things. List some in the table.

Living Things	Non-Living Things

What are some of the components of an ecosystem and how do they interact?

If you were thinking of a freshwater ecosystem, what might you find there? (Hint: think of living and non-living things)

What are examples of good and bad ways humans can impact an ecosystem?

Autumn is here! How could animals and plants respond to seasonal changes in an ecosystem?

Think of a garden ecosystem. You might have one in your house or in the yard or out in the park. What are some components of a garden ecosystem and how do they interact?

Extension Spark:

Build a tiny plant world (this might be called a terrarium). It may take a few days to gather your supplies and build.

Watch this video on how: [Build a Tiny Plant World](#)

