



Disturbance: What happens next?

Activity Worksheet

Lesson objectives:

- Define “disturbance” and how they can impact the ecology of an ecosystem.
- Describe the disturbances of a longleaf pine savanna and how native plants respond.
- Conduct an experiment following the steps of the scientific method.

The longleaf pine savanna ecosystem is an interesting forest type that use to cover much of the southeastern United States. It is maintained by naturally-occurring forest fires, caused by lightning and historically even some Native American tribes. These fires moved along the ground, creating an opportunity for a variety of plants to grow. An event like this that changes the natural landscape is called a *disturbance*.

1. How do you think a fire might change a landscape?

2. How might these changes affect the plants growing in that area? How would the ecosystem respond?

In this lesson, we are conducting an experiment where we mimic a disturbance. We went out to our yards and took a bit of the natural community that we put into three different ecosystems held in containers.

3. What did the surrounding area look like from where you got your soil? What plants were growing there? What did the soil look like?

4. Each ecosystem needed to be put in areas that receive different amounts of sunlight. Where did you put them and why?

Direct: _____

Indirect: _____

No light: _____

5. What is your hypothesis for what will happen at the end of the experiment?

