



Aim:

How do ecosystems change over time?

Engage

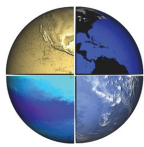
Ask:



Sometimes there is a very abrupt change to an ecosystem. What are some natural events that can change ecosystems very quickly?

Fires, volcanoes, floods, hurricanes, etc.

◇ List some answers on the board.



3D-VIEW

- Launch the 3D-VIEW menu by double-clicking on the desktop icon.
- Click on: Biosphere.
- Click on: Lesson 10 - Succession.
- Click on the **3D Mount St. Helens Animation**.

◇ View the **3D Mount St. Helens Animation**. Use the slider to observe the changes in vegetation before and after the 1980 eruption.

Ask:



What did you observe in this animation?

Prior to the eruption, the area around the volcano was very green. Soon after, the area appeared to be very bare. Years later, the green (vegetation) was coming back.

Say:

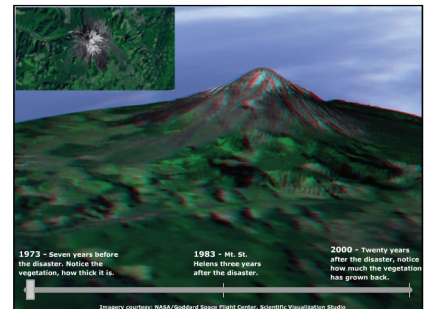
“The images we just saw show how the ecosystem around Mount St. Helens recovered after the eruption in 1980.

It is very common for ecosystems to be disrupted. Now, let’s see how ecosystems are able to recover from large-scale natural changes.”

Objectives:

Students will be able to:

- ✓ Describe the process of succession that results from damage to an ecosystem.
- ✓ Determine the proper sequence of stages in ecological succession.
- ✓ Evaluate whether natural disasters are truly disastrous for ecosystems.



Mount St. Helens Animation

Credit: NASA/GSFC

Scientific Visualization Studio

Teacher Tip: If possible, allow students to explore this animation sequence in pairs.