Ecological Succession After a Wildfire

Narrator:

From June through November 1988, almost 250 individual wildfires spread out of control in Yellowstone National Park in the United States. It was the largest wildfire in the park's recorded history.

The fires affected almost 1.2 million acres of the park. In some areas, entire forests were destroyed. In a matter of days, though, ecological succession began.

Fireweed was one of the first plants to reappear. In fact, most of the small plants regrew from existing sprouts about ground and roots and seeds below ground.

One year after the fires, a blanket of wildflowers covered the burned areas. Wildflowers continued to grow and dominate these areas for about the next four years.

Lodgepole pines are the predominant tree in Yellowstone National Park. Many were destroyed in the fires. However, the lodgepole pine is serotinous, meaning it produces pine cones sealed with a waxy resin. The pine cones remain closed until exposed to temperatures above 113 degrees Fahrenheit.

In other words, fire is needed for lodgepoles to reproduce. After a fire had passed through a stand of lodgepole pines, any pine cones opened from the fire and reseeded that area. One year after the fires, the first lodgepole pine seedlings were appearing in the burned areas. Twenty-five years after the fires, the burned areas of Yellowstone National Park are still recovering. You can still see dead trees (called snags) standing among 24-year-old lodgepole pines.

