

Saltcedar

Once saltcedar takes over an area, it keeps other plants out by oozing salt from its leaves. Soon, birds, animals, and even insects are driven away to look for food elsewhere.

How does this plant affect habitats and ecosystems?

Students will examine the impacts of saltcedar and participate in a webbing activity to understand ecosystem dynamics when saltcedar invades the landscape.

Levels

Grades 4-8

Subjects

Science, Language Arts

Skills

Discussing, Examining, Investigating, Journaling

Concepts

Interactions of living things and environments; inquiry process; diversity of life; connections of science, technology, society, and local landscapes

Objectives

Students will understand the term ecosystem.
Students will learn and demonstrate the interconnections within an ecosystem.
Students will understand the full impact of introducing a noxious weed into an ecosystem.

This activity is directly tied to the tenth spread, pages 19 and 20, in the *What's In Your World?* publication located inside the back pocket of the activity tool kit.

Materials

(20 student class-size)

What's In Your World? booklets (pp. 17-18) - 1 per student

Journal or Notebook and Pencil - 1 per student

Riparian Webbing Cards - Nametags or pictures of riparian (river) organisms - 1 per student

String

Time Considerations

Preparation - 30 minutes

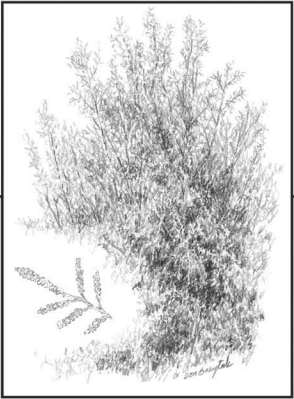
Activity - 60 minutes

Lesson Overview

- Exploring Ecosystems - Discussion and Webbing (60 minutes)

Background

Saltcedar is a native of the Middle East and Asia. People brought it to North America in the early 1800s to plant in their gardens, to provide wind-breaks, and to control erosion along streambanks. By the early 1850s, saltcedar "escaped"--they spread to wild and natural areas. By 1938, saltcedar was found from Florida to California, and as far north as Idaho and Montana. Today, saltcedar is one of the Top 10 worst weeds in the United States.



Saltcedar loves water. It grows along streams and rivers, around springs, and along the shores of lakes and reservoirs. A stand of saltcedar can suck the ground dry, using more than 200 gallons of water every day. That's enough water in a year to create a swimming pool the size of a city block and 9 feet deep!

That kind of thirst reduces flowing streams to a trickle, or even drinks them dry. Saltcedar also clogs river channels and reduces the size of spring floods. Floods are part of the natural ebb and flow of most rivers, and many native plants depend on floods. Cottonwood trees and willows, for example, will grow only where floods scour mud off the gravel and cobblestones. When saltcedar moves in, cottonwoods and willows become scarce.

Once saltcedar takes over an area, it keeps other plants out by oozing salt from its leaves. The leaves drip salt and fall to the ground, making the surrounding soil too salty for most plants.

Soon, birds, animals and even insects are driven away to look for food elsewhere.

A single full-grown saltcedar can produce 500,000 seeds each year. The seeds are small and light, with a tuft of fuzz on one end that helps them float on the wind or water. The seeds don't live long, but they sprout quickly, sometimes even while they're still floating on the water. This way, saltcedar can march down a stream or river, eventually lining the banks for miles downstream.

Saltcedar can also reproduce from its roots or pieces of stem. After a wildfire, saltcedar are often the first plants to grow back. And the deep roots help this weed survive long dry spells.