

Exploring Ecosystems - Discussion and Webbing

(60 minutes)

STEP ONE. Begin the activity with a discussion on ecosystems.

What is an ecosystem?
What is present in an ecosystem?

Discuss the energy flow in an ecosystem from the sun to the plants to herbivores to omnivores and carnivores to decomposers and on.

STEP TWO. Next, ask students to form a circle and give each student a riparian (means river habitat) webbing card. Standing in the middle, find the student with the sun card and give him/her the end of the ball of string.

Ask the students where the energy from the sun goes?
Who in the circle uses the sun? (plants)
Which student is a plant?

Give him/her some string. *Who gets their energy from plants?* (herbivores) *Which student eats plants?* Give him/her some string.

Continue through the food chain, connecting all the plants and animals and resources, as their relationships to the rest of the group emerge. Make sure that all the students are connected, holding a piece of string.

What does this look like? (a web)
Who is connected to the web? (all organisms and resources)

Now, ask one of the students to pull on the string. *Who felt the pull?* This is called an ecosystem or a food web, where every individual is important to the whole community. Experiment with taking one member away from the group--*what happens?* The whole ecosystem is affected.

STEP THREE. Ask students to draw an example of the ecosystem they just created in their journals, being sure to label all the components in an ecosystem.

STEP FOUR. Next, ask the students to read pages 19 and 20 in their *What's in Your World?* booklet.

STEP FIVE. Ask the students--*what is going to happen to our riparian habitat when saltcedar is introduced to the stream bank?*
Who is it going to affect?

Other plants will initially be affected as the soil becomes more salty over time. As plants die, animals who eat the native plants (herbivores) would be without a food source which may lead

to animals who eat other animals (omnivores and carnivores) with a smaller food source--this directly affects the number of animals that can live in a habitat and the size of an ecosystem.

So, *who does the introduction of saltcedar to riparian habitat affect?* Everyone! Every organism in an ecosystem is connected and would therefore be affected by the introduction of saltcedar to the ecosystem.

STEP SIX. Have students draw in their journals another ecosystem that shows the effects of saltcedar being introduced to a riparian ecosystem.

