

Invasion of the Habitat Snatchers!

By Kathy Kelchner, Frances Slocum State Park, Nescopeck, PA

Standard Statement(s): 4.5.4 A, B -know types of pests; understand pest control

Content Objective(s):

- 1) students will recognize problems caused by invasive plants
- 2) students will identify invasive plants found in the park/school area
- 3) students will list 4 methods of control for invasives

Assessment Strategies:

Short written quiz
Invasive plant photo essay
Oral discussion

Procedures:

Go over definition of native and invasive. Ask what an invader does (takes over). Ask if students know that we have invaders in the park. Show examples of garlic mustard and Japanese knotweed. Go for short walk to observe other invasive plants.

Go over reasons invasives are such a problem.

- a. they grow rapidly and crowd out native plants
- b. they didn't evolve along with the local wildlife, and often aren't used by them
- c. they form thick stands that exclude most other plants
- d. they sometimes change fundamental ecosystem processes

Discuss methods of control:

Hand pulling
Tilling
Fire
Hot water/steam
Mowing
Mulching
Girdling
Herbicide

Since Japanese Knotweed is a problem in our park, we have harvested some of it, being careful to cut it where it grows and only taking sections of stalk back to the other side of the park. We'll use these stalks to make rainsticks, and hopefully you'll remember the invasive nature of this plant.

Rainstick:

Each student puts 9 or 10 pins randomly around the stalk. They then cover one end of the rainstick with a small play dough pancake. Next they pour about $\frac{1}{4}$ cup of millet or rice into the rainstick. Tell them to cover the open end with their hand, turning the stick end over end. If they like the sound they should cover the other end with another play dough pancake. If not, they can add seed or take some out. They then cover both ends with felt circles, tying them on with the leather cord. They can add beads or feathers to personalize the rainsticks.

Suggested Level:
4th grade

Standard Category:

4.5 IPM

Materials:

plant samples
pictures of areas affected by invasives
Japanese knotweed stalks or cardboard mailing tubes
beads
millet
straight pins
leather cord
play dough
rice
feathers

Instructional Strategies:

discussion
observation

References:

Project WET curriculum guide
Plants in Peril by Diane O'Reilly Lill
Invasive Plants by John Randall
Going Native by Janet Marinelli

Related Web Sites:

<http://www.nysaes.cornell.edu/ent/biocontrol>
<http://www.aqd.nps.gov/npci/>
<http://www.igc.apc.org/birc/>