

## LESSON 11: EMPOWERMENT—WHAT CAN YOU DO?

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**Duration:** One or two 45-minute class periods

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**Background information:**

Encroachment of invasive exotic plant species is a real issue in the Southern Appalachian region. Not only do invasive exotics infringe upon native plant and animal habitats, they are also very expensive to eradicate. Many hours are necessary to locate and rid invasive exotics from natural ecosystems in our area. In many cases, exotic invasive species are so tenacious that eradication efforts have to be repeated. Costs for eradication include human resources, chemicals, machinery, etc.

The economics of exotic invasive species have not been completely studied in the United States, but the U. S. Forest Service estimates that economic impacts to agriculture, natural areas, and gardens are \$35 billion a year.

Often students feel powerless to create solutions to major environmental issues. In part, this disenfranchisement stems from their inability to change governmental policy or the large expense involved in many solutions. The problem of exotic invasive plant species is one that easily allows small-scale solutions by youth.

*Sources:*

National Park Service, Great Smoky Mountains, online at  
<<http://www.nps.gov/grsm/pphtml/subplants29.html>>

Bright, C. 1998. Life Out of Bounds: Bioinvasion in a Borderless World. New York: W.W. Norton & Company, Inc.

U. S. Forest Service, Southern Research Station. Compass 2005, Volume 1, number 2 (spring).

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**Objectives:**

Raise students' awareness of action they can take at their age to address the environmental issue of exotic plants invading Southern Appalachian ecosystems.

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**Prepare in advance:**

- Copy Handout 1—Possibilities—for each student and make an overhead transparency
- Have multiple copies of Handout 2 (Outreach Contacts) and Handout 3 (Opportunities) available

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**Materials:**

- overhead projector
- overhead markers

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**Description:**

Students will envision and discuss solutions to the local exotic invasive species problem.

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**Instructional sequence:**

(10–15 minutes)

- **Break** students into groups of four.
- **Explain** to students that they will brainstorm ideas for solutions to the local exotic invasive plant problems the students can engage in.
- **Instruct** students to discuss possible ideas for interventions and solutions within their small groups. One student will record the ideas.
- **Request** reports from each small group and **write** all ideas on the board.
- **Discuss** viable options.

(5–10 minutes)

- **Give** each student a copy of Handout 1 (Possibilities).
- **Instruct** students to read thoroughly the possibilities for action(s) they might consider taking.
- Direct students to place a check mark beside ideas they are interested in.

(10–15 minutes)

- **Display** transparency of Handout 1 (Possibilities) on the overhead projector.
- **Request** feedback from small groups and individuals.
- **Indicate** level(s) of interest in various ideas with tallies.
- **Discuss** viable options for action as: a class, a small group, an individual
- **Encourage** students to choose realistic goals.
- **Distribute** copies of Handout 2 (Outreach Contacts) and Handout 3 (Opportunities) to students to use to begin planning their actions.

Teacher note: The discussion of possibilities will most likely carry over to the next class meeting.

- **Assignment:** Students will create an action plan to deal with the local exotic invasive plant problem. As students create the plan they should consider the availability of the following: time, money, political connections, community connections, transportation needs, tools, laborers, etc.

*Source: Hungerford, H.R., Litherland, R.A., Peyton, R. Ben, Ramsey, J.M. & Volk, T. L. 1996. Investigating and Evaluating Environmental Issues and Actions: Skills Development Program. Champaign IL: Stipes Publishing Company.*