

## Invasive Species Research Project

**Time:** 2 class periods

**National Benchmarks:** Benchmarks 5A: Diversity of Life; 5D Interdependence of Life; 5E: Flow of Matter and Energy; 9B: Symbolic Relationships; 9D: Uncertainty; 12B: Computation and Estimation; 12D: Communication Skills; 12E: Critical-Response Skills.

**National Science Content Standards:** *Science as Inquiry: A*; *Life Science: C*: Biological Evolution; The Interdependence of Organisms; Matter, Energy, and Organization in Living Systems; *Science and Technology: E*: Abilities of Technological Design; Understandings about Science and Technology; *Science in Personal and Social Perspectives: F*: Population Growth; Natural Resources: Environmental Quality; Natural and Human-induced Hazards; Science and Technology in Local, National, and Global Challenges

**New York State Standards:** 1, 2, 4, 5, 6, 7

**Objective:** Students will know that aquatic communities change composition based on vegetation types and be able to explain the differences.

### Lesson Outline:

1. Students select a local invasive species to research
2. Students conduct research
3. Students present the results of their research

**Materials:** copies of Invasive Species list; copies of “How to do Research”; library access and/or internet access

**Engage:** Ask students to brainstorm a list of local invasive species. If you have used any of the invasive species lessons in this module, students should know a few. Make a list on the board, and augment with provided list if necessary. Assign species based on your preference.

**Explore:** Students should have several days to complete research during or after school. Students can create posters, brochures, or other materials to display what they have learned. Students should be ready to present their findings to the class.

**Explain:** Encourage students to think about the positive aspects of invasive species to provide a more in-depth examination of invasions. Although we generally state that “invasives are bad”, it is interesting to think about whether all invasives are bad, and what that term means to the students. Students may also want to discuss what it means for an organism to be invasive, and how long it needs to reside in a location before it becomes “native”, such as the apple tree and the earthworm. Asking students to define these terms can lead to an interesting discussion on the range of changes that invasives have caused, realizing that some things may be ‘better’ while others are certainly ‘worse’.

**Extend:** Students can research the eradication methods available to their invasive species, and the implications of such a plan.

**Evaluate:** Students complete research project.

**Comments:**