

# **Changing Hudson Project**

## **Invasive Species Research Project**

#### Introduction

Scientists estimate that since the early 19<sup>th</sup> century at least 117 alien species have been introduced and become established in the freshwater portion of the Hudson River. Invaders continue to arrive at the rate of about seven species each decade (Mills, et al. 1997). These species were introduced from places outside the Hudson Valley, but they have established self-sustaining populations here that have had profound impacts on the ecology and economy of the Hudson River watershed. Your assignment is to learn about one of these species by learning to use the resources of the library and the internet.

The objectives of this research project are to:

- learn to use library resources, scientific journals and the internet to do a literature search on a scientific topic
- learn to evaluate the content of websites and internet sources for accuracy, objectivity, and timeliness
- learn how to document sources using both in text citations and references using APA format
- become familiar with the history, biology, environmental and economic impacts of at least one alien species in the Hudson River ecosystem
- summarize specific information about one alien species in a well-written report, poster, or pamphlet
- be ready to present your results to the class

### Procedure

Select a local alien species to study. Your task is to find answers to the questions listed below from accurate and current sources, and to document your sources in a scientifically acceptable format.

# Questions and Topics to be Researched

- 1. What kind of an organism is it? What does it look like and how would you identify it?
- 2. What is its native range and habitat? Where does it normally live?
- 3. Approximately when and how did this alien species get to the Hudson River Valley?
- 4. Describe its biology. What does it eat and how and when does it reproduce? Describe its life cycle.
- 5. How has this species changed the ecology of the ecosystem that it invaded?
- 6. What are the economic impacts on these ecosystem changes?
- 7. What do you think could be done to reduce the impact of this organism on the local ecosystem?