

## Great Lakes Grief

#### Trip at a Glance

Students create a flyer in newspaper format for distribution at local supermarkets. With this activity's focus on an environmental concern, it gives students the opportunity to experience a community action and awareness campaign.

#### Destination

Students will be able to

- Name and recognize some nonindigenous species of the Great Lakes.
- Locate the origins of the nonindigenous species.
- Explain the way the nonindigenous species was introduced.
- Identify the problems concerning the introduction of nonindigenous species to an existing freshwater ecosystem.

#### Adventure Levels

Grades 5-12

#### Areas of Interest

Science and Language Arts

#### Locale

Classroom, with students seated at a desk or table

#### Length of Stay

Two weeks

### Invader Background Check -

The balance of nature, as we often hear, is a delicate one. Each organism has its own special niche, its own specific tolerance levels to many different environmental and human-imposed factors. Nonindigenous species invading the Great Lakes is only one of many factors that determines which species will survive in a freshwater ecosystem.

In today's society we need students and the community-at-large to be more aware of how we affect the balance of nature and weigh carefully the results of our actions and decisions. Environmental concerns can be understood by even the youngest school children. By providing them with a background of information and an opportunity to actively use the information, they will begin to develop a feeling of stewardship for their world. Doing this mini-newspaper activity will help each student develop environmental concern and hopefully become a basis for action during his or her life.

## Foreign Language

Ecosystem
Exotic species
Habitat
Nonindigenous species

#### Amenities Provided

Nonindigenous Species List 12.1 Great Lakes Grief Rubric 12.2 Great Lakes Grief: Your Assignment 12.3

### Things to Pack

Internet access

Research materials (e.g., encyclopedia, books, newspaper, journals)

Word processing or newsletter programs

# Passport for Success

Students should have word-processing and research experience. Ideally, this activity should be presented in the context of a unit on biomes/ecosystems. It could also be integrated into Earth Day activities.

### **Itinerary**

- 1. Make a copy of the nonindigenous species list. Cut the list up, and put into a container. Student teams can randomly pick the species they will research. Depending on the grade level, students can work in pairs or in small groups to complete the mini-newspaper on the exotic species they have been assigned to research.
- 2. Copy the student assignment sheet, and distribute to each student.
- As a class go over the assignment sheet step by step.
- 4. Distribute rubric and review grading criteria/expectations.
- Answer students' questions, and assign due dates for rough draft and final copy. Time allotted will vary according to grade level, time available for research, and students' word processing skills.
- 6. Have student teams orally present their finished product to the class at the end of the activity.
- Distribute copies of students' newspapers to supermarkets once they have been thoroughly checked for any errors. Perhaps students could use a peer review process to proofread each other's articles.
- 8. Make copies to distribute at a supermarket as people check out. It is a way to educate the community as well as the students.

### Travel Tips

- If budget constraints limit the number of copies, try to explore sources for donations for copying or funding for copies.
- Students may be able to locate more information if they know the species' scientific name when they begin their research.
- Since the "newspaper" flyer is intended to be distributed to the community at local supermarkets, it is very important that the final product be free of spelling and grammatical errors.



Teacher's note: "I always receive positive feedback from community members regarding an Earth Day activity that involves decorating grocery bags for distribution at our local supermarket."

### Debriefing

Use the rubric to evaluate students on the finished product and their presentations to the class.

## Extending the Visit

- A field experience or invited speakers can strengthen this activity.
- Students could make informational posters to display instead of newspapers.

#### Places to Go

#### **Web Sites**

Great Lakes Fishery Commission Web site: http://www.glfc.org



Great Lakes Information Network (GLIN)

Main Web site: http://www.great-lakes.net

Exotic Species Web site: http://www.great-lakes.net/envt/flora-fauna/invasive/invasive.html

Great Lakes Sea Grant Network Web site: http://www.seagrant.wisc.edu/greatlakes/glnetwork

Great Lakes Sport Fishing Council Web site: http://www.great-lakes.org

Sea Grant Nonindigenous Species (SGNIS) Web site: http://www.sgnis.org

#### **Fact Sheets and Publications**

The Great Lakes: An Environmental Atlas and Resource Book
Copies may be obtained from:
Great Lakes National Program Office
U.S. Environmental Protection Agency
77 West Jackson Blvd.
Chicago, Illinois 60604

#### Multimedia

Great Lakes Solution Seeker CD-ROM and activity guide. The Ohio State University. 1996.

### Travel Agent

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# Nonindigenous Species List—

Zebra mussel			
Common carp	Purple loosestrife		
 	Round goby		
Alewife	Flowering rush		
Sea lamprey	     Quagga mussel 		
Coho salmon	Rainbow trout		
Spiny water flea	     Goldfish 		
   Brown trout 	     Curly-leaf pondweed 		
Tubenose goby			

# Great Lakes Grief Rubric-

Topic	Exemplary	Proficient	Developing	Beginning	Unacceptable	Score
Content of Oral Report	Elaborate, quoted sources, correctly answered questions	Less elaborate, correctly answered questions	Less elaborate, an- swered questions	Simple, unable to answer questions	Incomplete, unable to answer questions	
(10 points)	(9–10)	(7–8)	(5–6)	(3–4)	(0–2)	
Delivery	Spoke clearly, did not read from notes	Spoke clearly, referred to notes	Spoke clearly, read directly from notes	Unclear speech, referred to notes	Unclear speech, read notes	
(10 points)	(9–10)	(7–8)	(5–6)	(3–4)	(0–2)	
Timing	5–8 minutes in length	Minimum of 5 minutes, more than 8 minutes	Minimum of 5 minutes, more than 10 minutes	Less than 4 minutes	Less than 3 minutes	
(10 points)	(9–10)	(7–8)	(5–6)	(3–4)	(0–2)	
Writing Content (40 points)	Developed topic fully and clearly. Good logical organization, used accurate and relevant facts or examples. (36–40)	Satisfactory development of topic. Good organization, used mostly accurate and relevant facts or examples.  (30–35)	Showed weakness in development of topic. Showed some organization, showed some accurate and relevant facts or examples. (20–29)	Minimally developed topic. Little or no organization, had little or no relevant facts or examples.  (10–19)	Incomplete develop- ment of topic. Unclear ideas, hard to understand.	
Sentence Fluency (10 points)	Easy to read; varied vocabulary, sentence length, beginnings. Details vivid.  (9–10)	Easy to read; varied vocabulary, sentence length, and beginnings.	Most parts easy to read. Some varied vocabulary, sentence length, beginnings.	Awkward to read. Vocabulary was constant; needed descriptive words and details. (3–4)	Difficult to read. Choppy or long rambling sentences. Sentences began the same. (0–2)	
Grammar and Spelling (10 points)	All grammar and spelling correct (9–10)	One or two grammar and spelling errors	Three or four grammar and spelling errors (5–6)	More than four grammar and spelling errors (3-4)	Very frequent grammar and spelling errors (0–2)	
Timeliness (10 points)	Assignment handed in on time (10)	One day late (8)	Two days late (6)	Three days late (4)	More than three days late (2)	