

# GRADE 6

## ALIEN INVADERS!

### POST-VISIT LESSON

## **Invasive Species Public Service Announcement**

# ALIEN INVADERS!

## POST-VISIT OVERVIEW

The following post-visit activity is designed to synthesize and expand the knowledge students have gained in their Forever Earth experience by creating a Public Service Announcement (PSA) about an invasive species. By completing this activity, students re-analyze the impact of such species on an ecosystem and consider the value in educating and motivating the public in regard to invasive species.

## THEME

Introduction of an invasive species upsets the balance of an ecosystem.

## KEY QUESTIONS

What effect can an invasive species have on an environment? What, if anything, can or should be done to prevent or control the introduction of an invasive species?

## GOAL

Students will determine the costs and benefits of selected invasive species on the environment.

## OBJECTIVE

Students will write a public service announcement (PSA) on the environmental costs of invasive species.

## NEVADA STATE STANDARDS CORRELATION

- L.8.C.3.** Students will evaluate how changes in environments can be beneficial or harmful.
- L.8.C.4.** Students know inter-related factors affect the number and type of organisms an ecosystem can support.
- E.L.A. 6.6.2** Use organizing techniques appropriate to the purpose of writing.
- E.L.A. 6.6.6** Produce writing with a voice that shows awareness of intended audience and purpose.
- E.L.A. 6.6.7** Share final drafts with a designated audience.
- E.L.A. 9.6.2** Develop and deliver presentations that include media aids appropriate to audience and purpose.

## CLARK COUNTY SCHOOL DISTRICT OBJECTIVES (GRADE 6)

Students will:

- discuss the costs and benefits of human-caused changes in the environment; and
- use examples to describe how interrelated factors influence the number and type of organisms an ecosystem can support.

## SNAP CONSERVATION EDUCATION AND INTERPRETATION THEME CORRELATIONS

The post-visit grade 6 activities support the following guiding themes developed by Clark County-based educators:

- Increasing human activity on highly sensitive and easily damaged lands has profoundly altered the natural environment of Southern Nevada, affecting native biota including threatened and endangered species and requiring active management of native and non-native species.
- Maintaining growth and quality of life, and protecting watershed, water quality, and adequate water supplies for all life in both developed and natural communities challenges people to resolve the issue of long-term sustainability.

### PREREQUISITE CLASSROOM EXPERIENCES

- Classroom lesson on introduced/invasive species
- Forever Earth field trip

### VOCABULARY

- descriptive, informative, and persuasive writing
- invasive species
- public service announcement (PSA)
- slogan
- target audience

## POST-VISIT LESSON: Invasive Species Public Service Announcement

### Part 1 ▶ Introduction

Students are told that they will apply what they've learned about invasive species (such as zebra mussels) to produce a public service announcement (PSA) to get the word out to the public about these "alien invaders."

Students are presented with examples of print, video, audio advertisements, and public service announcements (PSAs).

The teacher discusses the differences between marketing products and selling ideas (i.e., between commercial advertisements and PSAs).

PSAs from the National Weather Service such as "Flooding Ahead; Turn Around; Don't Drown," can be downloaded from:  
[www.nws.noaa.gov/os/water/tadd/tadd-resources.shtml](http://www.nws.noaa.gov/os/water/tadd/tadd-resources.shtml)

**TIME** 30-60 minutes

#### **MATERIALS**

Print, video, and audio advertisements and public service announcements  
TV/VCR  
Audio tape recorder  
Computer with Internet access

PSAs on topics such as boat and water safety and harmful exotic species can be downloaded from:

[www.dnr.state.mn.us/news/psas/index.html](http://www.dnr.state.mn.us/news/psas/index.html)

PSAs on Aquatic Nuisance species can be downloaded from:

[www.100thmeridian.org/video.asp](http://www.100thmeridian.org/video.asp)

Commercials can be downloaded from:

<http://video.google.com/superbowl.html>

### Part 2 ▶ Digging Deeper

The teacher facilitates a class discussion about the following topics and concepts:

1. **Target audiences.** *How do advertisements, commercials, and PSAs differ according to the age, gender, or special interests of the audience?*
2. **Images.** *Do the images inform, persuade, stir up emotion, enhance the message, or appeal to certain audiences? What makes the images dramatic or memorable?*
3. **Special effects or techniques.** *How are sound effects, music or songs, celebrities, humor, or emotion used to make the advertisement, commercial, or PSA more effective or memorable?*

Students categorize the messages of the advertisements, commercials and PSAs according to the intended purpose. *Is the purpose to present a description, to provide information, or to persuade?*

Students brainstorm memorable messages or slogans from advertisements, commercials, and PSAs. Students discuss how a short descriptive slogan can capture the message (**Student Reference: Catchy Slogans/Messages**).

### Part 3 ▶ Concept Development

Begin by having students recall the definition of invasive species.

**TIME** 30-60 minutes

**MATERIALS**

**Student Reference:**  
**Catchy Slogans/Messages**

**TIME** 60 minutes  
Science Textbook

Connect their recall with what they learned about zebra mussels during the Forever Earth field trip.

Students select and research an invasive species (**Student Reference: Invasive Species**). Students should take notes on the geographic area of origin and on the ecological and economic impacts caused by their selected invasive species.

#### Part 4 ▶ Linkage and Presentation of Findings

Students work in pairs to plan and write a 30 or 60 second PSA urging the public to:

- prevent the introduction of zebra mussels into Lake Mead; or
- advocate for control of another invasive species.

Refer to **Student Reference: Writing a PSA**.

Have students practice reading their PSAs before sharing them with the rest of the class. Consider helping students to share their PSAs with:

- Peers at their school
- Forever Earth project manager
- Interpreters from the Lake Mead National Recreation Area
- Las Vegas Review-Journal, or local radio/TV station.

## EXTENSIONS

- Students create a storyboard for a video PSA. On one side, include the message/slogan and sound effects or music. On the other side include the corresponding visual image. Film the PSA and send it to a television station.
- Create a PSA for radio. After recording it, send the PSA to a radio station that appeals to the target audience.
- Make a poster of the PSA.

## RESOURCES

### INVASIVE SPECIES INFORMATION ONLINE RESOURCES

#### 100th Meridian Initiative

Information on how to help this organization stop the spread of zebra mussels is provided at:  
[www.100thmeridian.org/zebras.asp](http://www.100thmeridian.org/zebras.asp)

Photos, posters, slogans to stop the spread of zebra mussel are available at:

Computer with Internet access  
Note taking materials

**Student Reference: Invasive Species**

**TIME** 30 minutes or homework

**Student Reference: Writing a PSA**

<http://www.100thmeridian.org/photos.asp>

**The Biodiversity Partnership**

This document lists the name, type, origin, extent and damage caused by invasive species in Nevada:

[www.biodiversitypartners.org/invasive/factsheets/NV.pdf](http://www.biodiversitypartners.org/invasive/factsheets/NV.pdf)

**Bureau of Land Management (BLM)**

BLM’s war against weeds in Nevada is described at:

[www.nv.blm.gov/Resources/noxious\\_weeds\\_revised.htm](http://www.nv.blm.gov/Resources/noxious_weeds_revised.htm)

**Center for Invasive Plant Management**

Learn how one organization supports natural resource managers, scientists, and educators pursuing ecological approaches to invasive plant management at:

[www.weedcenter.org/](http://www.weedcenter.org/)

**University of Nevada, Reno**

Wanted Posters for Invasive Weeds can be found at:

[http://www.ag.unr.edu/wsjiipm/Wanted\\_posters/wpost.html](http://www.ag.unr.edu/wsjiipm/Wanted_posters/wpost.html)

**OTHER INVASIVE SPECIES RESOURCES**

Order a free “Zebra Mussel Watch” wallet-sized card that describes the zebra mussel problem; explains how to identify it; and offers suggestions for preventing its accidental transport into new territory.

<http://seagrant.wisc.edu/zebramussels/orderform.asp>

Slovic, B. (2005). “*Mustard busters* relish yanking of invasive weed: Plants are threatening wildflowers at Lake Mead.”

[www.lasvegassun.com/sunbin/stories/lv-other/2005/feb/01/518218988.html](http://www.lasvegassun.com/sunbin/stories/lv-other/2005/feb/01/518218988.html)

**PSA-WRITING RESOURCES**

Press Release Writing Tips: How to Write Public Service Announcements

[www.press-release-writing.com/newsletters/t54-psa.htm](http://www.press-release-writing.com/newsletters/t54-psa.htm)

Marketing Your Message: PSA Bibliography

[www.psaresearch.com/](http://www.psaresearch.com/)

The R-J Speakers Bureau: Free speakers in Marketing and Advertising 387-2944

**ADAPTATIONS FOR DIVERSE LEARNERS**

- Consult with Forever Earth project manager prior to field trip to discuss specific needs of the class or individuals; decide which aspects of the program content or delivery to appropriately alter for culturally/linguistically, behaviorally, and cognitively diverse learners and for the gifted and talented.
- Assign preferential seating.
- Allow peer readers and writers.
- Provide samples of finished products as models.
- Create graphic organizers.
- Pre-teach critical vocabulary.
- Establish and teach rules that communicate expectations.

## ASSESSMENT

Brainstorm the qualities of a good PSA with the students; discuss quality standards; assist the students in the creation of a rubric.

Students may evaluate their own work through reflective journal entries.

Conduct a peer review in class. After students share their PSAs, students give the presenter(s) one commendation and one recommendation.