



Giant African Land Snail

Science, Social Studies and Language Arts

Brief Description:

Invasive species are problems across the United States and in every community. This lesson enlists students to identify and map an invasive species specific to South Florida (at present), the Giant African Land Snail.

Objectives: Students will be able to:

1. Identify the invasive species Giant African Land Snail that may be found locally;
2. Explain how this species became an invader;
3. Describe what type of damage this invasive species can do;
4. Develop a plan of action to prevent further introduction and eliminate that invasive species from your locale;
5. Implement that plan as a service learning project; and
6. Locate, identify, photograph and report Giant African Land Snails to the Department of Agriculture and Consumer Services, Division of Plant Industry.

Getting Started

- Make copies of the student pages.
- Decide how you would like to set up the class in small groups.
- Visit the Web sites listed and familiarize yourself with the information presented and tools available.

Materials:

- Copies of Student handouts
- Computers with Internet Capabilities
- County, Township or City Maps



Background:

Further information is found at the Florida Department of Agriculture and Consumer Services, Division of Plant Industry at <http://www.freshfromflorida.com/pi/gals/>

Activity One- Have you seen the Giant African Land Snail?

1. Have students read the *Giant African Land Snail Case Study* or show students one or both of these clips of the Giant African Land Snail posted the Florida Department of Agriculture and Consumer Services Public Information channel on YouTube at <http://www.youtube.com/watch?v=64eCuzQPSqQ&feature=c4-overview&list=UUOEVfDmL7FdFVIAoQYZFZtA> or <http://www.youtube.com/watch?v=Wc8Dx2HcPgg>. A version with Spanish sub-titles may also be found there. Or just search Giant African Land Snail there are multiple news clips.
2. Have students record observations in their neighborhoods. Ask them to walk around their house and neighborhood and see if they spot any invasive species. Where they were living, what they look like, the problems they caused. Etc. Or you can put the students into groups and have them walk around the school campus making observations.
3. Have students learn more information about the Giant African Land Snail that is a problem in their community using the Florida Department of Agriculture and Consumer Services, Division of Plant Industries at <http://www.freshfromflorida.com/pi/gals/>. Additional information may be found at *The Center for Invasive Species and Environmental Health* at <http://www.invasive.org/>, the USDA's *National Invasive Species Information* center at <http://www.invasivespeciesinfo.gov/>, the Florida Invasive Species partnership at <http://www.floridainvasives.org/>.
4. Discuss the damage that this invasive species can create in their ecosystem.

Activity Two- Solving the Problem

1. Discuss with the students the ways that invasive species are minimized or eradicated by professionals (researching biological predators or parasites, diseases, pesticides, trapping and removal, mechanical methods, etc.).
2. Show students the opportunity to participate in this battle on the Florida Invasive Species partnership at <http://www.floridainvasives.org/> to report and map the species officially.
3. Use the resources on that site to further educate students – listed under Tools and Training.
4. Have each group research and design a plan to participate in solving the problem of invasive species. You can search, under the tools and training section, invasive plants in your county. Students can come up with eradication plans for their hometowns.
5. Ask each group to share their plan with the rest of the class.

Activity Three- Service Learning: Find the Invaders

1. If your school has a community service or service learning requirement, engage students in enacting their plans and become engaged in identifying and eradicating invasive species.
2. Using the second handout “Find the Invaders” have students survey the community to locate invasive species that have been identified in activity one and two and others. As part of the classroom portion of the activity, students can begin with the school grounds.
3. As part of the activity, ask each group to give the invasive species an ID number or letter and use that ID to map the location on the local map and write detailed directions to locate the invader so that anyone could find it or eliminate it. Student can also create a bar graph to compare species and numbers in the area.
4. Using the invasive species partnership identified in activity two report the invasive species at <http://www.floridainvasives.org/>. Have the students share the information or take photos of the snails they find and send information to the Florida Department of Agriculture and Consumer services at <http://www.freshfromflorida.com/pi/gals/> or by calling the department helpline at 888-397-1517.
5. Enact the plan to eliminate the invader and prevent further introductions.

Evaluation

1. Have the students complete the chart provided as a quiz.
2. Assess the students’ cooperation and performance on the group research project and engaging in the service learning project.
3. If students report local invasive species identified locally, have them document that report for credit.

Extensions and Variations

1. Encourage youth groups to engage in this process as well (Eagle Scout Projects, 4-H, FFA, Boys and Girls Clubs, Environmental Clubs etc.).
2. Use this project as a focus for Earth Day activities as a focus on the impact that one individual can have. It can be used to demonstrate both positive (eradicating the snails) and negative (introducing the snails) impacts of one person.
3. *Protect U.S.* will have an Giant African Land Snail PowerPoint on its website at <http://www.protectingusnow.org/> but at the time this lesson was ready for pilot it was not yet posted. After piloting adaptations will be made to include this resource in the lesson.

