



New York Sea Grant

229 Jarvis Hall
SUNY at Buffalo
Buffalo, NY 14260-4400
Phone: 716.645.3610
Fax: 716.645.3612
E-mail: hmd4@cornell.edu
Web: www.nyseagrant.org

Classroom Plants and Animals *Useful Teaching Tools Potential Invasive Species*

By Helen M. Domske

Teachers who use living plants and animals in their classrooms extol the many benefits of these organisms from encouraging scientific observation to teaching student responsibility. Unfortunately, at the end of each school year, animals are often released into the wild by teachers who have no idea they can be introducing invasive species that can harm the environment and impact populations of local native plants and animals.

Benefits of Classroom Plants and Animals:

- Classroom plants and animals can help teach science (food requirements), math (measurements), language arts (writing stories) or geography (creating range maps).
- Caring for living things can also help increase students' awareness of nature, nurturing skills and inquiry.
- Many teachers utilize these classroom plants and animals as valuable teaching tools as well as a source of fun and enjoyment for their students.



Although useful as teaching tools, living plants and animals that are no longer wanted, have outgrown their tanks or enclosures, or become a burden to care for, can become invasive species if released into the wild. There are documented cases of crayfish that were used in classroom experiments and for learning, that were unknowingly released well outside their natural range, posing a threat to local aquatic habitats.

Once released, as invasive species, these plants and animals can degrade local habitats, they outcompete native plants and animals, alter food webs and reduce biodiversity. Some common classroom plants and animals that have the potential to become invasive species are aquatic organisms such as goldfish and other aquarium fish, crayfish and Chinese mystery snails. Aquarium plants like elodea, hydrilla and Eurasian milfoil can spread quickly and harm waterways where released. Reptiles, like red-eared slider turtles, and amphibians, like frogs or salamanders, can also cause ecosystem harm if released to the wild. Classroom plants and animals that are native to a school's region should not be released to the wild either, since they can possibly introduce diseases.

Invasive Species

Unwanted Classroom Plants and Animals:

Once a classroom animal is no longer wanted or can be cared for, teachers need to take the proper steps to prevent them from becoming invasive species.

- Check with the seller or provider and see if they will take the animal back. Some aquarium or pet stores will take back animals that outgrow their tanks or enclosures, depending on their policies.
- Check with local zoos, aquariums or aquarium clubs.
- Offer them to another teacher, a friend, or parent.
- If other options do not work out and euthanasia is considered, consult a local veterinarian for assistance.
- Releasing classroom pets into the wild is bad for the pet and the environment.
- For unwanted plants, you can dry them completely or freeze them before placing them in the trash. Do not add them to compost, as their seeds could still be viable.



Don't Let Them Loose!

Selecting Classroom Plants and Animals:

When choosing plants or animals for classroom use, carefully research the species you select and choose native or non-invasive species. There may be state regulations that prohibit keeping non-native species, so check with wildlife officials in your area. This is essential if animals are purchased through the internet. There may be school policies that restrict the use of classroom animals, so check with an administrator.

Depending on the species selected for classroom use, it may be helpful to check on any student allergies or asthma. Also, a valuable lesson to teach students right from the start is to carefully wash their hands after handling or caring for classroom animals.

Learn about the animals' needs and care requirements before obtaining them. Create a plan for eventual fate, transfer or disposition of plants and animals before bringing them into the classroom. Proper care of any living organism is essential and consideration must be given to the animal's welfare during weekends, holidays and summer recess.

"Hitchhikers" to Avoid:

When you purchase plants or animals for classroom use from biological suppliers, make sure to carefully inspect your shipment to check for unwanted "hitchhikers" on packaging.



Rinse containers with a diluted bleach solution and discard all packaging in the trash. Even the water that contains the plants or animals could be contaminated and should be treated with a diluted bleach solution before pouring down the toilet or sink. This water should not be put into a storm drain or ditch.

Illinois-Indiana Sea Grant has developed a classroom animal adoption pledge: www.iiseagrant.org/NabInvader/ClassroomPetAdoptionPledge.pdf

New York Sea Grant is part of a nationwide network of 30 university-based programs working with coastal communities through the National Oceanic Atmospheric Administration (NOAA). Sea Grant research and outreach programs promote better understanding, conservation, and use of America's coastal resources. Sea Grant is funded in New York through SUNY and Cornell University and federally through NOAA.

