

Classroom Guidelines for Preventing the Introduction and Spread of Aquatic Invasive Species (AIS)

Many teachers and students are unaware of the impacts¹ of disposing unwanted live specimens (animals, plants, and microorganisms) into local waters, letting them go down drains or flushing them down the toilet. Recent releases of concern include goldfish, red swamp crayfish, Brazilian elodea, and red-eared slider turtles! It may seem simple and kind hearted, but releases can reduce biodiversity, water quality, harm fishing and native species.

Besides not being good for the environment, releases are illegal in most states. Aquarium fish can compete with native fish. Invasive plants can clog waterways and impair boating, swimming and other recreation. Some organisms can spread diseases and parasites by improper disposal of contaminated water and packing material. Releases can also have economic impacts such as a loss of income that would have come from tourism and fishing, damage to infrastructure from fouling organisms, costs to clean up shorelines, and the devaluation of waterfronts. Preventing releases is important to protect our lakes, rivers, wetlands, estuaries, and oceans from the harmful impacts of AIS.

What can teachers and students do with unwanted live study specimens such as aquatic plants, animals, fish, and microorganisms?

These guidelines support the bi-national *Habitattitude*^{*} education campaign, which promotes ethical and humane treatment of organisms and alternatives for preventing the release of organisms into the environment through reuse and resale of live organisms, and proper disposal. The guidelines are also meant to comply with federal, state/provincial, tribal, and local regulations concerning possession or transport of AIS.

When obtaining a live study specimen for your classroom:

- ✓ **Research and select** species that comply with federal, state/provincial, tribal and local laws and regulations² which restrict certain species. When possible, choose a species that is native to your region, is not invasive or is a recommended alternative^{1,2,3}.
- ✓ **Confirm** the scientific name of plants or animals that come in a science learning kit with the vendor to ensure you have the correct species information and details about their care.
- ✓ **Inspect the contents and packaging that arrives with your organism.** Remove any unwanted seeds, plants, and animals and dispose according to the guidelines below.
- ✓ **Report** to your state/provincial wildlife or agriculture agency if you observed or suspect that an organism may have escaped from the package in which it was shipped or was accidentally released.
- ✓ **Dispose** of packaging materials in a sealed plastic bag in the trash.
- ✓ **Sterilize** discarded water (¼ teaspoon bleach for each gallon of water) and **dispose** sterilized water down the toilet or sink—never down a storm drain where it could enter and damage local waterways.

What to do with unwanted plants and animals:

- ✓ **Give** unwanted plants and animals to another school or classroom, environmental learning center, aquarium, zoo and where possible return them to the pet store or supplier. If your plant or animal finds a new home with another classroom or is taken home by a student, be sure to emphasize “Don’t Let It Loose” into the environment.
- ✓ **Sign** an Adoption Pledge Form with the new owner (see attached⁴) when organisms are removed from the classroom or when a student is allowed to take an organism home to ensure that they are not released into the environment.
- ✓ **Dispose** of unwanted plants in a sealed plastic bag in the trash. These materials should not be composted because their seeds and other plant parts may spread.
- ✓ **Contact** a veterinarian or pet retailer for guidance on humane disposal of animals. Disposal of live organisms should be considered as the last resort.



- ✓ **Inspect** live study specimen orders and remove unwanted seeds, plants or animals
- ✓ **Give** unwanted organisms to another school, environmental learning center, aquarium or zoo
- ✓ **Sterilize** discarded water and **drain** water away from water bodies – never down a storm drain
- ✓ **Dispose** of aquatic plants and packaging materials in a sealed plastic bag in the trash
- ✓ **Contact** a veterinarian or pet retailer for guidance on humane disposal of animals

¹ For assistance, visit the Non-indigenous Aquatic Species Database at <http://nas.er.usgs.gov> or contact a local expert.

² To find out which species are regulated in each state/province visit www.takeAIM.org, www.iiseagrant.org/speciesregs, <http://laws.justice.gc.ca/eng/regulations/SOR-2007-237/page-3.html#h-7>, <http://laws.justice.gc.ca/eng/regulations/SOR-2007-237/page-11.html#h-39>, http://www2.publicationsduquebec.gouv.qc.ca/dynamicSearch/telecharge.php?type=3&file=/C_61_1/C61_1R7.HTM

(French)

³ Visit the Nab the Aquatic Invader Website at www.iiseagrant.org/NabInvader/Lakes/admin/classroom.html [Note that these live organism teaching tools are also found in the Pacific, Atlantic, and Gulf regions of the site from the homepage www.iiseagrant.org/NabInvader.]

This site offers classroom learning activities on invasive species that are linked to learning benchmarks and positive steps to prevent their introduction.

⁴ Visit the Oregon Sea Grant website for the Adoption Pledge form on guidelines to follow when adopting a classroom organism <http://seagrant.oregonstate.edu/sgpubs/e-11-011>

* For more details on the Habitattitude program, visit www.Habitattitude.net