

How should you dispose of AIS?

Aquatic plants: Completely dry or freeze the plants, then add them to conventional garbage that does not get composted. Compost should be avoided because many seeds can withstand drying and freezing.

Fish and invertebrates: Euthanize (for example, freeze for several days), then dispose of in conventional garbage.

Water: Add enough bleach to the water in which the organisms were shipped to make a minimum 5% solution (1 part bleach to 20 parts water). Dispose of in a sanitary sewer, never down a storm drain.

Packaging: Because packaging is designed to keep your classroom species alive, it also keeps unwanted hitchhikers alive. Treat it with bleach solution if possible and dispose of it in conventional garbage.

Further Information

Teacher resources list:

www.invasivespeciesinfo.gov/resources.

Resources to teach students about aquatic invaders:

<http://www.sgnis.org/kids/index.html>

Exotic Aquatics on the Move curriculum guide:

<http://www.iisgcp.org/EXOTICSP/index.html>

Invasive Species Information Node:

<http://invasivespecies.nbi.gov>

Habitattitude—preventing aquatic pet/plant

introductions.: <http://www.habitattitude.net/>

Oregon Invasive Species Council:

<http://www.oregon.gov/OISC/>

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You Can **STOP** the Spread of

Aquatic Invasive Species (AIS)

Photo by Chris Lukhaup,
<http://www.crayfishworld.com>

Photo by Samuel S. Chan,
Oregon Sea Grant

Five easy steps to prevent the spread of AIS

- 1 Never release any nonnative organism into the wild.**
- 2 Never move water, animals, or plants from one body of water to another.**
- 3 Learn to recognize common invaders.**
- 4 Share your knowledge with others to prevent the spread of AIS.**
- 5 Report invasive species. In Oregon, call 1-866-INVADER.**

What are aquatic invasive species (AIS)?

AIS are nonnative aquatic organisms that cause ecologic or economic harm when they are introduced into environments outside of their home range. Once established in new regions, AIS threaten the diversity of native species and ecosystems because of their ability to eat more, compete better, and reproduce faster than native species. AIS can damage our native waters by

- Degrading ecosystems
- Displacing native species
- Destroying habitat
- Altering food chains
- Introducing new diseases
- Limiting recreation



Many of the species that are recommended for classroom use are actually considered **invasive species** in the state of Oregon.

To ensure that these species do not cause ecological and economic harm, current Oregon regulations stipulate that these species cannot be released into the wild. Students may feel that release is desirable, but instead you should discuss with your classes the impacts of invasive species and alternative methods of disposal. Consider options for selecting native species rather than using nonnative species. (Consult the Oregon Department of Fish and Wildlife regarding permit requirements for native species first). It is recommended that teachers contact their Education Service District, school science coordinator, or organism distributor to inquire about returning or recycling classroom species. See the back of this brochure for suggested ways to dispose of nonnative species acquired for classroom purposes. Also see the list of Web resources on AIS topics.

Please do not release nonnative organisms into Oregon waters. Below are two examples of aquatic invasive species commonly used in classrooms.

The rusty crayfish

(*Orconectes rusticus*)

The rusty crayfish can grow to be 4 inches long and can be identified by the rust-red spots on each side of its body. It has large, smooth claws that range from grayish green to reddish brown.

It is native to the Ohio River drainage but has been spread to other locations by anglers using it for fishing bait. These crayfish are very aggressive and affect aquatic systems by displacing native species, destroying aquatic plant beds, and altering food chains.

This map compares the range of introduced populations of rusty crayfish (red) to that of native populations of the crayfish (brown).

Keep this species out of Oregon waters.

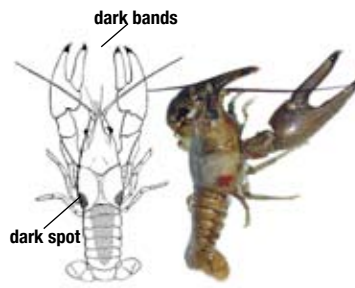
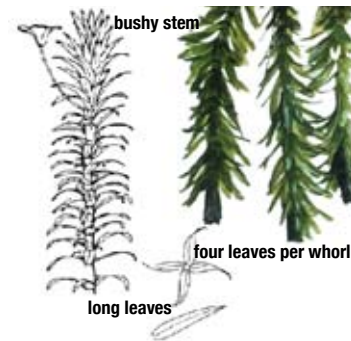


Photo by Paul Gunderson, Minnesota Sea Grant



Map provided by USGS

For more information on rusty crayfish, go to http://www.iisgcp.org/EXOTICSP/rusty_crayfish.htm.



<http://www.ecy.wa.gov/programs/wq/>



Map provided by USGS

Brazilian elodea

(*Egeria densa*)

The aquatic plant Brazilian elodea grows both rooted and free floating, reaching lengths of up to 6 feet. It has compact, bright-green leaves that grow in groups of 4 arranged around the stem. It produces large, white flowers with 3 petals that rise above the plant on stalks. Although native to regions of Brazil, Uruguay, and Argentina, it is favored worldwide in the aquarium industry and is often sold under the names "anacharis" or "Brazilian waterweed." Once introduced, this plant is difficult to control. It forms thick mats that choke out native aquatic plants, degrade habitat, and impede recreation.

From this map you can see the waterways where Brazilian elodea has been introduced (red). Although found in Oregon, it is not in all of our drainages.

Let's try to keep it that way.

For more information on Brazilian elodea, go to <http://invasivespecies.gov/profiles/brazwaterwd.shtml>.