

Voluntary Guidelines to Prevent the
Introduction and Spread of Aquatic Invasive Species:
Water Gardening

Aquatic Nuisance Species Task Force
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Background: Water gardens, or aquatic gardens, generally are designed to house and display aquatic plants and fish. They range in size from small patio container gardens to large ponds, both natural and human-made. Despite their beauty, water gardens can lead to introductions of invasive plants and animals into natural waterways.

Many of the plants and animals traditionally used in water gardens are non-native, and can become invasive if introduced into natural waterways. Such introductions can be accidental or purposeful. For example, major rainstorms can wash plants, seeds, fish and other animals from a water garden into an adjacent waterway where they can flourish. Likewise, draining water or dumping water garden plants and animals into a nearby waterbody can lead to an invasive species becoming established. Introductions into natural waterways can have harmful environmental and economic consequences. This is one reason why many states prohibit release of organisms into natural waterways.

Many states regulate what organisms can be sold for use in water gardens. However, many aquatic plants and animals are available through the online marketplace, which is only loosely regulated. Therefore, it is important for individuals to be aware of their state's regulations to ensure that organisms being considered for purchase are not prohibited. (To find out which species are regulated in each state visit www.takeAIM.org.) Because even non-regulated species could become invasive if introduced into natural waterways, it is also important for water gardeners to know the specific steps that they can take to ensure that their water gardening activities don't lead to introductions of invasive organisms.

The following guidelines are intended to provide water gardeners* with consistent invasive-species-prevention recommendations. Accordingly, water gardeners, water gardening societies, retailers, and outreach professionals who work with water gardeners are encouraged to use this information to guide their own activities and when developing outreach tools. More information and examples of outreach tools incorporating these recommendations are available on the Web including www.takeAIM.org and www.Habitattitude.ca/www.Habitattitude.net.

* Please note that these guidelines are not intended for those involved with creating or conducting outreach on rain gardens or stormwater retention basins, although some of the individual recommendations may apply.

Guidelines:

When constructing a new water garden

Locate a new water garden away from all waterways and flood-prone areas. *This will help ensure that the plants and animals in the water garden will not be carried into local ditches, canals, streams, ponds, lakes, etc. as a result of heavy rainfall.*

When adding plants and animals

Choose regionally-native or non-invasive plants and animals. *This will reduce the amount of plant-removal (i.e., weeding) needed to maintain the garden while also reducing the risk to nearby waterways should any organisms be moved by wind, animals, flooding, etc. Moreover, many states regulate the possession of invasive species. Using non-invaders will help water gardeners conform to those regulations. Visit www.takeAIM.org to find out which species are regulated in each state.*

Purchase from local, licensed nurseries. *Local nurseries are more likely to be aware of state and local regulations because of their licensing requirements. Many jurisdictions require that the license be posted. If the license isn't clearly visible, ask an employee about their licensing.*

Rinse plants in a bucket to remove all dirt and any attached debris including other vegetation, animals, or eggs before planting; strain debris from the bucket water; place this debris and any unwanted packaging material in a sealed plastic bag, freeze thoroughly, and dispose in the trash; dump water on dry land. *This will help keep unwanted plants and animals from being accidentally introduced into the water garden, and keep these same organisms out of adjacent waterways and storm drains that may lead to natural waterways.*

Remove any similarly attached debris from animals before adding them to the water garden; dispose of the debris as above. *This will also help keep unwanted plants and animals from being accidentally introduced into the water garden or into natural waterways.*

When doing maintenance

Check that the water garden remains isolated from natural waterways and areas that flood. *If this is not the case, the above recommendations regarding rinsing and plant and animal choice are even more critical; installation of standard landscape water diverting structures (e.g., water bars, swales) or relocation of the water garden should be considered.*

Remove uninvited plants that colonize the water garden. *A plant that moves into the water garden and becomes established is likely an invasive species. It should be removed and disposed of properly (see below).*

Freeze unwanted plants in a sealed plastic bag and dispose in the trash. *Unwanted plants should not be composted because their seeds and other reproductive plant parts may remain viable.*

Find a new home for unwanted fish and other animals such as a pet retailer, animal shelter, or other water gardener. *If an unwanted animal finds a new home with another water gardener, be sure to share these guidelines with the new owner. If euthanasia is an option, contact a veterinarian or pet retailer for guidance.*