

# Do your part to protect Lake Michigan and the region's waterways.

## Use native plants in place of aquatic invasive species.



Aquatic species that are not native to our area are invading Lake Michigan and regional waterways, causing irreparable harm and millions of dollars of damage. Invasive plants can:

- Displace native plants, which are important sources of food and shelter for wildlife,
- Change ecological processes, such as oxygen production because invasive plants can alter chemistry and flow, and
- Block drainage pipes, impede navigation and hinder commercial and recreational fishing.

The Invasive Species Ordinance passed City Council on May 9, 2007. This ordinance makes it unlawful to possess certain invasive species on a regulated list. The City of Chicago has worked with scientists and stakeholders to draft this regulated list, which includes live animals, viable plant parts and live transport species. While there are many more invasive species that could cause harm in the region, the initial list focuses on species that pose the most critical threat.

This flyer shows the aquatic invasive species that are prohibited in Chicago, as well as native alternatives for each species. To see the land-based species that are prohibited, go to [cityofchicago.org/invasivespecies](http://cityofchicago.org/invasivespecies) or call 312-743-9283. For the latest pertinent state and federal regulations, please visit [www.fws.gov](http://www.fws.gov) and [www.dnr.illinois.gov](http://www.dnr.illinois.gov).

### Prohibited:



**Water hyacinth**  
(*Eichornia crassipes*)

Aggressive invader. Reproduces quickly. Leads to fish kills. Also regulated by U.S. Code: Title 18, Sec. 46.

### Try these instead:



Pickerel weed  
(*Pontederia cordata*)

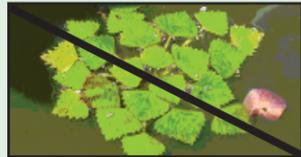


Arrow arum  
(*Peltandra virginica*)



White water lily  
(*Nymphae odorata*)

### Prohibited:



**Water chestnut**  
(*Trapa natans*)

Forms mats on surface of water. Fouls propellers and fishing lines. Prevents light and oxygen from reaching native plants. Also regulated by U.S. Code: Title 18, Sec. 46.

### Try these instead:



Pickerel weed  
(*Pontederia cordata*)



Arrow arum  
(*Peltandra virginica*)



White water lily  
(*Nymphae odorata*)

### Prohibited:



**Hydrilla/water thyme**  
(*Hydrilla verticillata*)

Spreads quickly. Very costly to eradicate. Crowds native plants. Also regulated by Federal Noxious Weed Act.

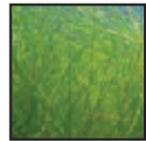
### Try these instead:



Canadian waterweed  
(*Elodea canadensis*)



Wild celery  
(*Vallisneria americana*)



Sago pondweed  
(*Potamogeton pectinatus*)

### Prohibited:



**Greater spearwort**  
(*Ranunculus lingua*)

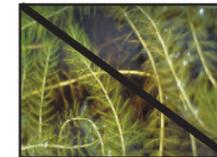
Severe invader elsewhere. Predicted to cause large problems if introduced to the Midwest.

### Try this instead:



Buttercup family  
(*Ranunculaceae*)

### Prohibited:



**Eurasian watermilfoil**  
(*Myriophyllum spicatum*)

Forms mats on surface of water. Fouls propellers and fishing lines. Prevents light and oxygen from reaching native plants.

### Try these instead:



Canadian waterweed  
(*Elodea canadensis*)



Wild celery  
(*Vallisneria americana*)



Sago pondweed  
(*Potamogeton pectinatus*)

### Prohibited:



**Brazilian elodea/waterweed**  
(*Egeria densa*)

Crowds out native vegetation. Costly to eradicate. Pending regulation by the Illinois Exotic Weed Act.

### Try this instead:



Canadian waterweed  
(*Elodea canadensis*)

### Prohibited:



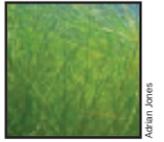
**Parrot feather watermilfoil**  
(*Myriophyllum aquaticum*)

Clogs waterways. Provides breeding areas for mosquitoes.

### Try these instead:



Wild celery  
(*Vallisneria americana*)



Sago pondweed  
(*Potamogeton pectinatus*)



Coontail  
(*Ceratophyllum demersum*)

### Prohibited:



**Water spinach**  
(*Ipomoea aquatica*)

Obstructs water flow. Overgrows other plants on river banks. Also regulated by Federal Noxious Weed Act.

### Try this instead:



American water willow  
(*Justicia americana*)

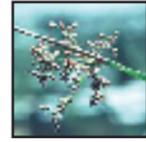
### Prohibited:



**Flowering rush**  
(*Butomus umbellatus*)

Rapidly expanding across North America.

### Try these instead:



Rush  
(*Juncus effusus*)



Three square bulrush  
(*Schoenoplectus pungens*)



Hard-stemmed bulrush  
(*Schoenoplectus acutus*)

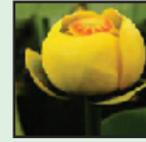
### Prohibited:



**European frog-bit**  
(*Hydrocharis morsus-ranae*)

Outcompetes native vegetation.

### Try these instead:



Yellow pond lily  
(*Nuphar advena*)



Bullhead lily  
(*Nuphar variegatum*)



White water lily  
(*Nymphae odorata*)

### Prohibited:



**Chameleon**  
(*Houttuynia chordata*)

Invades lakes and river shores. Outcompetes native vegetation.

No alternative native species.

For information on how to properly dispose of these species if you already have them, please see [www.habitattitude.net](http://www.habitattitude.net)



# Do your part to protect Lake Michigan and the region's waterways.

## Use native animals in place of aquatic invasive species.



Aquatic species that are not native to our area are invading Lake Michigan and regional waterways, causing irreparable harm and millions of dollars of damage. Invasive animals can:

- Make waters unusable for recreation and damage commercial and recreational equipment,
- Reduce natural biodiversity and degrade ecosystem functions, and
- Increase the operating costs of industrial processes such as drinking water treatment plants.

The Invasive Species Ordinance passed City Council on May 9, 2007. This ordinance makes it unlawful to possess certain invasive species on a regulated list. The City of Chicago has worked with scientists and stakeholders to draft this regulated list, which includes live animals, viable plant parts and live transport species.\* While there are many more invasive species that could cause harm in the region, the initial list focuses on species that pose the most critical threat.

This flyer shows the aquatic invasive species that are prohibited in Chicago, as well as native alternatives for each species. To see the land-based species that are prohibited, go to [cityofchicago.org/invasivespecies](http://cityofchicago.org/invasivespecies) or call 312-743-9283. For the latest pertinent state and federal regulations, please visit [www.fws.gov](http://www.fws.gov) and [www.dnr.illinois.gov](http://www.dnr.illinois.gov).

### Prohibited:



Johnny Jensen

**Monkey goby**  
(*Neogobius fluviatilis*)

Competes with native fish.  
Average size at adulthood: 7.7 inches

### Prohibited:



Jeff Gustafson

**\*Rusty crayfish**  
(*Orconectes rusticus*)

Removes fish habitat.  
Leads to declines in sportfish populations.  
Also regulated by Illinois Administrative Code 805.  
Average size at adulthood: 1.4-4 inches

### Prohibited:



AquaticCommunity.com

**Snakehead**  
(Any species from the genera *Channa* or *Parachanna*, from the family *Channidae*)

Voracious predator. Costly to eradicate. Also regulated by IL Admin Code 805 and the Federal Lacey Act.  
Average size at adulthood: 2-3 feet

### Try this instead:



JPhoto.dk

Short-nosed gar  
(*Lepisosteus platostomus*)

### Prohibited:



C. Gehrke

**European perch**  
(*Perca fluviatilis*)

Negatively impacts native fish.  
Average size at adulthood: 20 inches

### Try this instead:



M. Gehrke

Native yellow perch  
(*Perca flavescens*)

### Prohibited:



John H. Baigum

**African clawed frog**  
(*Xenopus laevis*)

Outcompetes and preys upon native frogs.  
Maximum size at adulthood: 4.7 inches

### Try these instead:



Miami University

Leopard frog  
(*Lithobates pipiens*)



Garth D. Howe

Bull frog  
(*Lithobates catesbeianus*)

### Prohibited:



**Oriental weatherloach**  
(*Misgurnus anguillicaudatus*)

Reaches high densities. Competes with native fish for food.  
Average size at adulthood: 9.8 inches

### Try these instead:



Emma Turner

Clown loach  
(*Chromobotia macracanthus*)



Emma Turner

Queen loach  
(*Botia dario*)

### Prohibited:



Thomas M. Hurlbut

**Chinese mysterysnail**  
(*Cipangopaludina chinensis*)

Reaches extremely high densities. Carries parasites and diseases.  
Average size at adulthood: 2.25 inches

### Try this instead:



Stijn Chesquiere

Tropical apple snail  
(*Pomacea bridgesii*)

### Prohibited:



Great-Lakes.org

**Silver carp**  
(*Hypophthalmichthys molitrix*)

Outcompetes native fish for food sources.  
Also regulated by Il. Admin Code 805 and the Federal Lacey Act.  
Maximum size at adulthood: 3.4 feet

### Prohibited:



Chinese Academy of Fishery Science

**Black carp**  
(*Mylopharyngodon piceus*)

Eats endangered mollusks.  
Also regulated by IL Admin Code 805 and the Federal Lacey Act.  
Average size at adulthood: 3-6 feet

### Prohibited:



Alexa Photo

**\*Grass carp/white amur**  
(*Ctenopharyngodon idella*)

Outcompetes native fish for food sources.  
Also regulated by IL Admin Code 870.60.  
Average size at adulthood: 4.9 feet

### Prohibited:

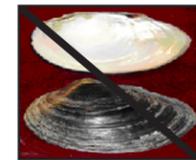


USGS

**Bighead carp**  
(*Hypophthalmichthys nobilis*)

Reaches high densities, grows up to 110 pounds.  
Competes with native sportfish.  
Also regulated by IL Admin Code 805 and the Federal Lacey Act.  
Average size at adulthood: 3.7 feet

### Prohibited:



Illinois Museum of Natural History

**No known common name**  
(*Anodonta woodiana*)

High reproduction rate.  
Competes with endangered native mussels.  
Average size at adulthood: 2-3 inches

### Prohibited:



Gunnar Verbo

**Eurasian minnow**  
(*Phoxinus phoxinus*)

Causes reduced reproduction of sportfish.  
Average size at adulthood: 5.5 inches

For information on how to properly dispose of these species if you already have them, please see [www.habitattitude.net](http://www.habitattitude.net)

[www.cityofchicago.org/invasivespecies](http://www.cityofchicago.org/invasivespecies) 312-743-9283

Partner organizations: Chicago Botanic Garden, Illinois-Indiana Sea Grant, University of Notre Dame, United States Fish and Wildlife Service, Shedd Aquarium and Wisconsin Sea Grant.

\*live transport species: species that can be transported live, but not sold live

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