

# Aquatic Invasive Species in the North Saskatchewan River Watershed

## What are Aquatic Invasive Species?

Any non-native organism (plant, insect, animal, etc) that has been brought from other places into Alberta's water.

<https://www.alberta.ca/aquatic-invasive-species-overview.aspx>

## Aquatic Invasive Species are a problem because they...

- o Outcompete and displace native species (have no natural predators)
- o Introduce diseases and parasites to natural water bodies
- o Impacts recreational areas and lowers shoreline property values
- o Cost tax dollars to manage and try to control their spread

## How do invasive species get into our water bodies?

By planting or growing invasive plants outdoors



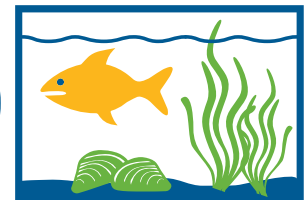
Through unwashed water gear and boats



Through improper disposal of plant & garden waste



By releasing aquarium pets & plants into the environment



**IN THE NEWS:** Aquarium marimo moss balls being sold in Alberta may contain live zebra mussels.

**DID YOU KNOW?** It only takes one boat carrying zebra or quagga mussels to create a serious infestation in a lake.

Read more at: <https://open.alberta.ca/-publications/alert-zebra-mussels-in-moss-marimo-balls>

### ALERT: AQUATIC INVASIVE SPECIES

#### Zebra Mussels in Moss (Marimo) Balls

*Dreissena polymorpha*



#### REASON FOR ALERT:

Marimo (Marimo) balls that were purchased in Alberta may contain zebra mussels. Zebra mussels are listed as a priority species. If you purchase moss balls after January 1, 2021, they must be disposed.

## Which aquatic species are invasive in our watershed?

### PHRAGMITES: *What's the problem?*



Phragmites, AnRo0002, CCO, via Wikimedia Commons

- o Outcompetes other aquatic plants for light and nutrients
- o Lowers water levels in wetlands, causes drier conditions and more sediment buildup
- o Density inhibits recreational activities and dry stalks can pose a fire hazard

#### KEY ID FEATURES:

- o Grows up to four metres tall in shallow or slow-moving water (lakeshores, wetlands, ditches)
- o Feathery seedheads with flowered spikelets

### PURPLE LOOSESTRIFE: *What's the problem?*



Purple Loosestrife, Pixabay.com

- o Adapted to stressful conditions, outcompetes native species
- o Forms dense stands in ditches, lakes, wetlands which disrupts open water areas and wildlife habitat
- o Attracts pollinators, which reduces visitation to native flowering plants

#### KEY ID FEATURES:

- o Tall semi-aquatic plant (1-2 metres)
- o Pink or purple flowers that circle its square stem
- o Often confused with fireweed

## FLOWERING RUSH: *What's the problem?*



- Spreads rapidly, displaces native plants and rushes
- Causes declines in dissolved oxygen, impacting aquatic life and water quality
- Impedes water flow and interferes with recreational activities

### KEY ID FEATURES:

- Umbrella-shaped clusters of white-pink petals
- Grows along shorelines or fully under water

## Problematic species to watch for (not yet in Alberta)

### QUAGGA & ZEBRA MUSSELS: *What's the problem?*



- Have few natural predators
- Suffocate native mussels and other aquatic life
- Reduce the food supply for native species
- Lower water quality
- Clog water intake pipes and other infrastructure

### KEY ID FEATURES:

- Both are D-shaped with dark and light stripes
- Size: 2-5 cms long, usually in clusters
- Have byssal threads which allow them to cling to objects

### EURASIAN MILFOIL: *What's the problem?*



- Outcompetes native milfoils and other aquatic plants
- Forms dense mats on water surface, hinders recreational activities
- Reduces light and oxygen levels in lakes

### KEY ID FEATURES:

- Submerged in shallow water
- Feathery green leaves, small red flowers on spikelets above water in mid-summer

## What you can do to help stop invasive species

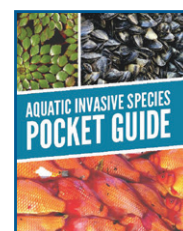
### PRACTICAL TIPS:

- Clean, drain, and dry your boats and other recreational gear before leaving the lake. By law, you must unplug your drain plug while travelling in Alberta. <https://www.alberta.ca/clean-drain-dry-your-gear.aspx>
- Drain aquariums on dry land or for alternative ideas, go to <https://abinvasives.ca/take-action/>
- Find a new home for an unwanted aquarium pet and never release fish or plants into natural waterbodies
- If you have invasive species in your garden or home, don't compost them. Find out how to dispose of them properly through [www.abinvasives.ca/take-action/#be-plant-wise-grow-me-instead](https://www.abinvasives.ca/take-action/#be-plant-wise-grow-me-instead)



### FIND OUT MORE:

- For a full list of Alberta's aquatic invasive species, see this provincial pocket guide: <https://open.alberta.ca/publications/9781460140758>
- For more info about invasive species in Alberta, how to report a sighting, or to find out how to dispose of them, please go to [www.abinvasives.ca](http://www.abinvasives.ca) and [www.alberta.ca/Aquatic-invasive-species.aspx](http://www.alberta.ca/Aquatic-invasive-species.aspx)



If you see an invasive species, or want to have your boat inspected, please call:  
**1-855-336-BOAT (2628).**  
Submit invasive sightings through the online app:  
<https://www.eddmaps.org/>

