

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



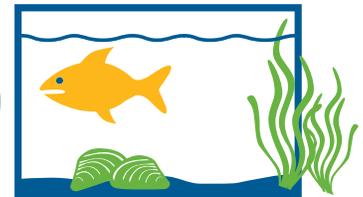
Through unwashed water gear and boats



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:
Zebra mussels have been found in moss (marimo) balls that were imported to Alberta. Zebra mussels are a highly invasive species that can damage ecosystems and reduce water quality. They also attach to and clog pipes and other infrastructure. 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?*



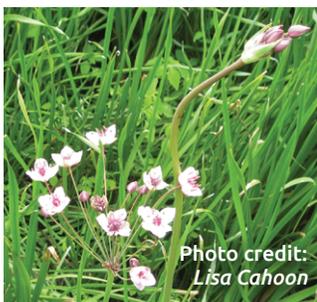
Purple Loosestrife, Pixabay.com

- 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



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 and 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/>



www.nswa.ab.ca