

FOCA Aquatic Invasive Species (AIS) Prevention & Monitoring Program

Volunteer Instruction Guide

Find it. Report it. Monitor it. Prevent the spread.

Thank you for joining this important program! The following guide, along with the [resources found on the FOCA website](#), has been developed to assist you in identifying, reporting and preventing the spread of aquatic invasive species (AIS) on your waterbody.

Step 1 - Find it

Learning to Identify AIS:

Depending on your knowledge of AIS, you will want to spend some time reviewing the identification sheets found in the toolkit. These AIS were highlighted because they either exist in Ontario and their spread needs to be documented; or they are threatening to invade Ontario, in which case we want to keep a watch out for them. In order to identify AIS and learn how to tell them apart from other similar looking species it is helpful to learn their individual growth habits and distinguishing features. There are also links to additional identification information available here: <http://foca.on.ca/ais-monitoring-volunteer-resources/>

Some species like the Eurasian Water-Milfoil are very hard to tell apart from the native Northern Water-Milfoil, in which case it is important to take clear photos of the leaves to send in with the report for verification. Do not feel limited to only looking for the aquatic invasive species highlighted in the identification sheets, if you find other invasive species, please report these as well!

Learning to Use EDDMapS Ontario:

Refer to the guide, 'How to Use EDDMapS Ontario' (on the website), to learn how to start using the reporting tool. As you will see in the guide, EDDMapS Ontario allows you to do more than just report species. You can also view your region on a map to see what AIS have been reported or are moving towards your region. You can click on the "Distribution Maps" tab, choose a species to view (e.g. Eurasian Water-Milfoil) and adjust the map until you can see your lake and any reports made on or near it. Also in EDDMapS Ontario, you can search reports through the "Queries and

Tools” tab which will let you search by waterbody, upper and lower municipalities, watersheds, and more.

Surveying:

To begin, you will want to determine if there are AIS already confirmed on your waterbody. As mentioned above, this can be done using EDDMapS Ontario. Whether you know there are AIS or not, an initial survey should be completed. This will include a visual survey of areas of public access and concentrated boat traffic, as well as areas of shoreline that are likely to provide suitable habitat, such as shallow areas and sheltered bays. It would be helpful to use a map of your lake showing water depths to assist in determining what your survey route will be. The number of surveying teams will depend on the size of your lake and the availability of volunteers. It might be easier to split the waterbody up into sections and have a team dedicated to each area.

Survey Timing:

Mid-July through September is generally the best time of year to conduct aquatic invasive species surveys. This is when the plant species are fully developed and display identifying features such as flowers. Depending on resources, two surveys should be taken during the growing season. Ideal conditions for surveying aquatic species are days when there is adequate sunlight, no wind and calm water conditions. Early in the morning on weekdays tends to be the best time to survey since waters are calm and there is less boat traffic. Sunny days will allow the surveyor to see further down into the water column than on an overcast/cloudy day.

Survey Equipment:

Surveys can be done from a boat, canoe, kayak, dock or shoreline. Surveying in a team of at least two is suggested for safety. Other equipment required may include:

- PFDs
- [‘Aquatic Plants Data Collection Form’](#)
- [‘Fish and Invertebrates Data Collection Form’](#)
- pencil and clipboard
- map of survey area
- cutting tool, permanent marker and zip lock bags for obtaining samples if required for further identification purposes
- digital camera/smartphone camera
- Optional: hand lens (magnifying glass) to assist in identifying species
- Optional: Smartphone, tablet or iPad (If using the mobile version of EDDMapS Ontario)

Step 2 - Report it – using the EDDMapS Ontario Online Tool

If you do not locate an AIS during your survey – that's great! But please look again another time. If you do locate a suspected AIS, please report it. You can report aquatic species one of two ways:

- 1) **On Paper and then On-line:** Out on the water, complete the 'Aquatic Plants' or 'Fish and Invertebrate' Data Collection form to record all information about the species and where on the water body it was located. Take a digital photo of the area of the invasive species and then a close up photo of an individual plant/fish/invertebrate. You might also take a sample for further examination and confirmation if necessary. Keep the sample in a zip lock bag and place in your refrigerator or freezer to keep it fresh. At your earliest convenience upon returning from the water, access the [EDDMapS Ontario online database](#) using your computer and enter the information you collected on the form. Not computer-savvy? Check if your association has an EDDMapS Ontario input volunteer available to enter your reports in the database.
- 2) **Using a Handheld/Mobile Devices from the Field:** Using a smartphone or iPad/tablet device, access the EDDMapS Ontario mobile app (see downloads link found in [volunteer resources online](#)) when you see a suspected AIS, and enter the information into the database – right on the spot.

Step 3 - Monitor it

If an invasive species has been found and reported on a waterbody, ongoing monitoring will be required to determine if the population/infestation is growing or spreading throughout the water body. If you reported the species in EDDMapS Ontario you can access your previous reports in 'My EDDMapS' and edit the report overtime, to update the size of the infested area and any changes in the abundance of the species characteristics, such as scattered/dense patches.

If an invasive species has been located on your waterbody you may wish to notify the other residents of the waterbody or post information in a public place to encourage people to avoid the infested area to reduce the chances of spreading it.

Step 4 - Prevent the spread

Communication and education are very important tools to reduce the spread of AIS. There are several steps to take while boating, gardening and fishing that will help to reduce the risk of introduction or further spreading. Please refer to the [fact sheets and resources available](#) in the toolkit to learn more about these best practices.