

What are invasive species?

- Plants, animals, insects, diseases, etc.
- Not-native to where they are found
- Harm our environment, cause damage to, or outcompete with native species
- Economic harm or harm to human health
- The terms “non-native” and “invasive” mean different things



What invasive species do we have in Almaguin and Here?

- Phragmites
- Garlic mustard
- Japanese knotweed
- Giant Hogweed
- Spiny water flea
- Rusty crayfish (Magnetawan River)
- Spongy moth
- Red-eared slider
- Purple loosestrife
- Starry stonewort –Bray lake
- Chinese Mystery Snails – Jacks lake....



Phragmites

Phragmites Australis –European Common Reed

- most aggressive invasive species in the wetlands of North America
- spreads by seeds, stolons and underground rhizomes
- extremely harmful to lakes, fish, native plants, turtles, toads and birds and Species At Risk.
- creates a fire hazard, line of site hazard, and plugs drains
- damages normal hydrology/swampy/monoculture
- 40-60% is below-ground
- secretes compounds that inhibit growth of other plants (allelopathic)



Japanese Knotweed

Fallopia japonica – invasive East Asian species

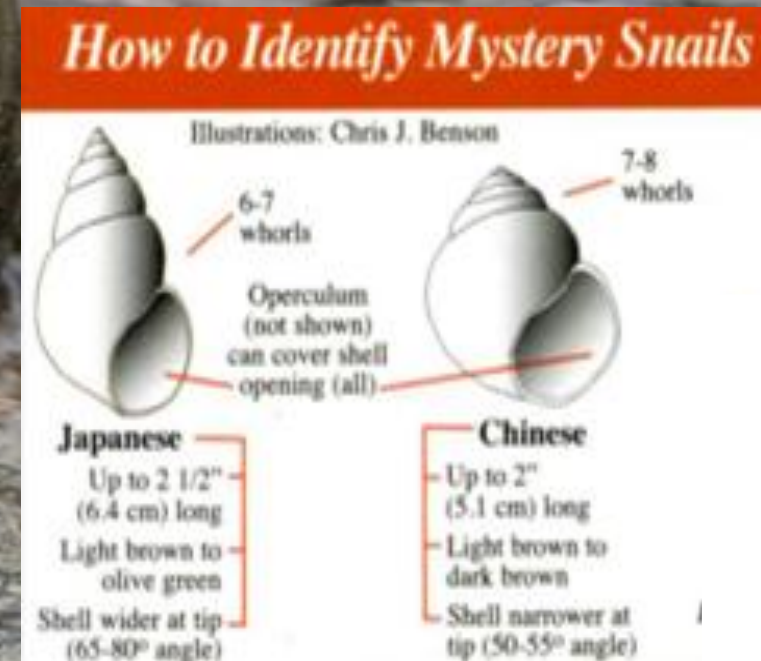
- extremely resilient plant, evolved to grow back after lava flows
- grows rapidly in very dense, bamboo-like thickets
- roots are extremely hard, woody structures
- can grow into concrete cracks and damage foundations of your house, roadways, bridges and erode shorelines
- can release chemicals into the soil that prevent the growth of other plant species, disrupting of habitat and food sources for native animals (allelopathic)



Chinese Mystery Snail

Cipangopaludina chinensis— invasive Eastern Asian species

- Chinese mystery snails are spread across Canada, largest number of reports in Ontario.
- Introduced to North America as a source of food and pet in aquarium settings.
- Outcompetes native mollusks and filter feeders for food and habitat. High filtration rate displayed when feeding leads to water quality issues comparable to that of invasive zebra and quagga mussels when their populations are large.
- Adult Chinese Mystery Snails can survive out of water for at least 4 weeks
- Molluscicides and water draining have both proven to be ineffective in terms of management. The most promising controls are physical removal and preventative actions



Spiny Water Flea

Bythotrephes longimanus – invasive Eurasian species

- Spiny waterfleas prefer large, deep, clear lakes, also found in shallower waters. Deeper, cooler waters during the day, swim to water surface at night to feed.
- Reproduce asexually, sexually and by cloning.. Multiply quickly. Eggs can survive through the winter on lake bottoms, be transported long distances on boats or equipment if they stay moist. Main diet of spiny waterflea is other zooplankton.
- The spiny waterflea has been found in all the Great Lakes and in more than 100 inland lakes in Ontario. – and Clear Lake.
- Their tail spines catch on fishing equipment, making it difficult to reel in lines.
- A single dark eye, four pair of legs and branched antennae used for swimming.
- There are no current methods for eradication of this species once established.



How much Phragmites Is in Clear Lake? Other Invasives – Unknown.....

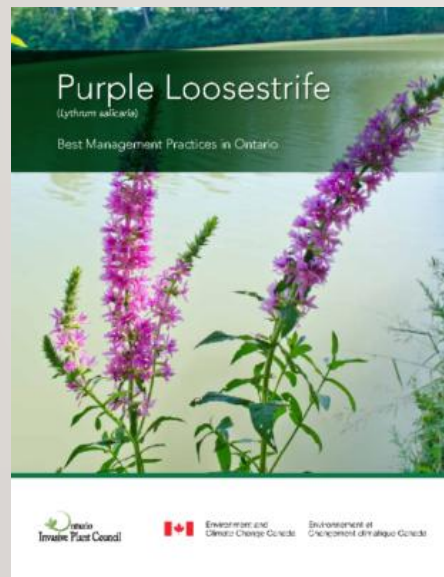
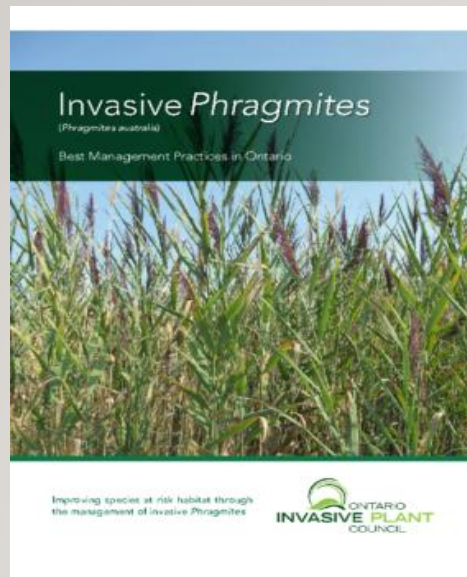
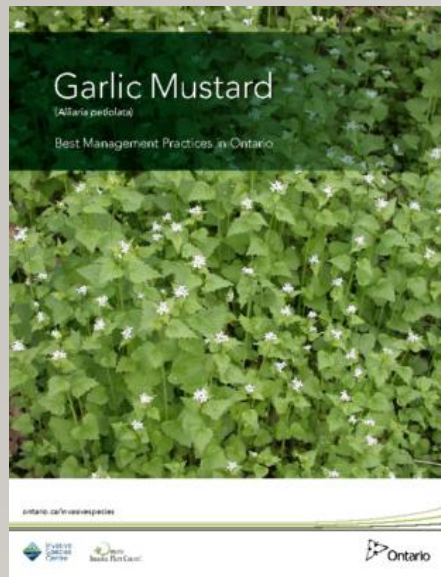
How much Invasive phragmites,

- Garlic Mustard,
- Giant Knotweed
- Japanese knotweed
- *Buck thorn, Hogweed, etc* does your neighbourhood... Your lake have?

Observed: Municipal roads and Highway 11 corridors and ditches.

So...it is throughout Almaguin. Where is it in Perry Township and what are you doing?





Best Management Practices

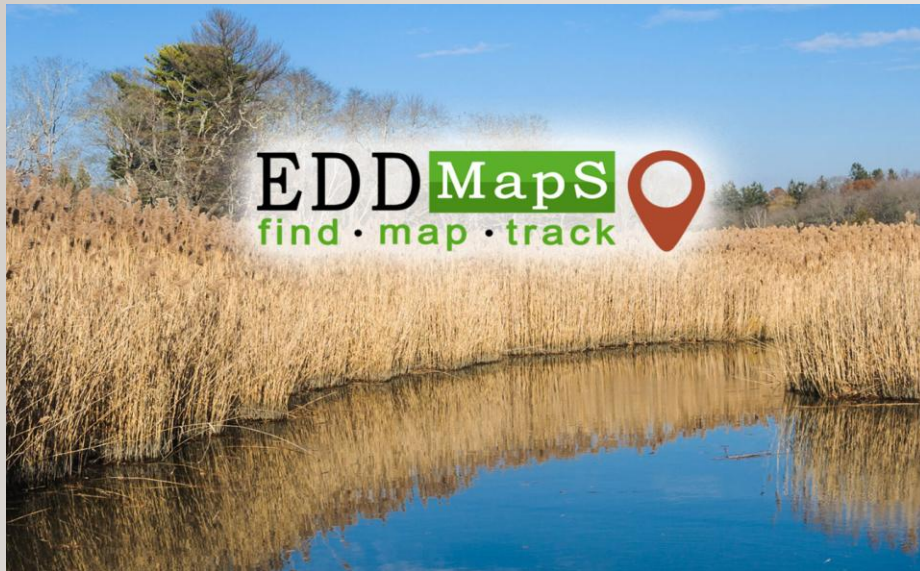
- https://www.ontarioinvasiveplants.ca/wp-content/uploads/2016/07/Clean-Equipment-Protocol_June2016_D3_WEB-1.pdf
- **Clean Equipment Protocol** for Industry Inspecting and cleaning **Equipment** for the purposes of invasive species prevention (Publication Information Halloran, Joe, Anderson, Hayley and Tassie, Danielle. 2016.)



Mapping and Tracking Invasive Species – on lakes, long CN tracks, along roads, on Private (private settings) and Public property.

EDDmapS

eddmaps.org



iNaturalist

inaturalist.org



Resources

- If you've seen an invasive species, report it! Take a photo, mark your location, and call the Invading Species Hotline at 1-800-563-7711 or post on: <https://www.inaturalist.org/places/canada> or www.EDDMapS.org.
- Ontario Ministry of Transportation on a roadway, call 416-235-4686 (Toll Free 1-800-268-4686)
- <https://www.invasivespeciescentre.ca/>
- Phragmites Working Group Lake Bernard
<https://www.nneec.ca/phragmites>
- <https://www.ontario.ca/page/invasive-species-ontario>
- <https://www.greatlakesphragmites.net/pamf/>