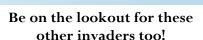
Eurasian milfoil (Myrophyllum spicatum)

Description - Perennial, rooted aquatic species with 6-20 ft. long stems that form dense canopies across the water surface. Leaves are in whorls of 4 with 14-20 leaf divisions.

Origin - Introduced from Europe and Asia in the 1940's.

Habitat - Prefers shallow bodies of water, 1-8 feet deep or disturbed lake-beds.

Control - Small infestations can be manually pulled. Specialized aquatic vegetation harvesting, biological control, and aquatic herbicide can be used for large infestations.



Leafy Spurge • Scotch Pine • Spotted Knapweed Didymo • Pale Swallow-wort • Canada Thistle Flowering Rush • New Zealand Mudsnail Asian Longhorn Beetle • Anything that looks suspicious! Check out the resources on the back or contact Three Shores for more information!

What can you do to fight invasive species?

Best Management Practices

- Plan activities to limit the potential for the introduction and spread of invasive species.
- Avoid traveling through or working in small, isolated populations of invasive plants.
- Clean equipment, shoes and clothing upon leaving infested areas, minimize soil disturbance
- Do not plant known invasive plants.
- Inform and educate others about common invasive species.
- Learn to identify invasive species.
- Report sightings to Three Shores CISMA or MISIN. A FREE downloadable app to report sightings and get invasive species information can be found at:

http://www.misin.msu.edu/tools/apps/

Resources

For more information about Three Shores CISMA or invasive species visit the Chippewa Luce Mackinac Conservation District website at www.clmcd.org and click on the "Invasives" tab.

Additional Invasive Species Resources:

Michigan Invasive Species Information http://www.misin.msu.edu

Midwest Invasive Plant Network www.mipn.org

Michigan Natural Features Inventory https://mnfi.anr.msu.edu

Get Involved

Find events throughout the EUP where you can volunteer to help Three Shores CISMA manage invasive species. Check our website or Facebook page for more information!



This brochure was developed by Three Shores CISMA, a cooperative partnership between federal, state, city, tribal and private entities working together to manage invasive species throughout Chippewa, Luce, and Mackinac Counties.

This brochure was funded in part with funds from the Michigan Invasive Species Grant Program through the Michigan Departments of Natural Resources, Environmental Quality, and Agriculture and Rural Development.

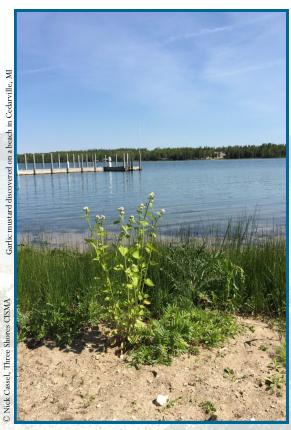
2847 Ashmun Street Sault Ste. Marie, MI 49783 Phone: 906-632-9611 ext. 121 threeshorescisma@gmail.com





Cooperative Invasive Species Management Area

Top 10 Invasive Species in the Eastern Upper Peninsula



Managing Invasive Species in Chippewa, Luce, and Mackinac Counties

Garlic mustard (Alliaria petiolate)

Description - Biennial herb, height 2 to 3 feet. 2nd year triangular toothed leaves smell like garlic when crushed.

Origin - Introduced from Europe for cooking and medicinal purposes.

Habitat - Wooded areas and can tolerate deep shade.

Control - Small infestations can be hand-pulled or mowed before seeding. Larger infestations can be sprayed with a broad-leaf selective herbicide before mature seeds form in July.



Oriental Bittersweet (Celastrus orbiculatus)



Description - A deciduous woody vine which coils around trees. Produces fruit in fall with an orange skin and red berry.

Origin - Introduced from Asia around 1860. Often used as an ornamental and for decorative purposes such as wreaths.

Habitat - Grasslands, roadsides, forests, fence rows.

Control - Prevention is the best control. Manual removal will provide temporary control. A foliar spray or cut-stump application of herbicide is recommended as the most effective form of control.

Himalayan Balsam (Impatiens glandulifera)

Description - Annual herbaceous riparian species which can grow up to 6 feet tall with a red hollow stem. Produce pink/purple flowers and seed pods which burst when touched.



Origin - Introduced from

Asia as an ornamental.

Habitat - Stream banks, roadsides, and gardens.

Control - Prior to seed pod formation, small infestations can be hand pulled if the entirety of the plant is removed. A foliar application of aquatic approved broadleaf selective herbicide is effective on large monoculture infestations.

Japanese knotweed (Fallopia japonica)

Description - Bamboo-like perennial which can grow over 10 feet tall. Spade shaped leaves that come to a point. Small white clustered flowers bloom in August/September.

Origin - Introduced from Asia as an ornamental, used in landscaping.

Habitat - Roadsides, urban backyards, old homesteads.

Control - Very difficult to eradicate. A multi-year treatment with proper systemic herbicide is effective.



Invasive Phragmites (Phragmites australis)



Description - Perennial wetland reed. Can grow 3-20 feet tall with horizontal running roots. Develops dense purple/ brown spikelets late August through October. Note: There is also a native specie of Phragmites found in the EUP!

Origin - Accidentally introduced from Europe in the early 1800's through ballast material found in freighters.

Habitat - Found in ditches, wetlands, and shorelines.

Control - An aquatic approved herbicide application in fall followed by a winter/spring cutting or burning.

Buckthorns (Rhamnus spp.)

Description - Small tree/shrub which grows 3-20 feet tall. Produce fruits which range from pale pink to black in September. Varieties include Common Buckthorn and Glossy Buckthorn. A small thorn at the end of each twig can be found on Common Buckthorn.

Origin - Introduced from Europe and Asia and planted for hedge rows and wildlife food.



Habitat - Pastures, forest edges, uplands, and lowlands. Control - Hand pull, dig, or mow small shrubs. Large shrubs can be controlled with a foliar application or cutstump herbicide application in fall or winter.

Purple Loosestrife (Lythrum salicaria)

Description - Perennial wetland herb with a square woody stem. Produces purple flowers in July which are arranged in spikelets. Can grow 2-8 feet

Origin - Introduced from Europe and Asia as an ornamental.

Habitat - Found in ditches, wetlands, and shorelines.

Control - Small infestations can be manually pulled. For large infestations,

biological control (beetles) or aquatic herbicide is effective.



Wild parsnip (Pastinaca sativa)



Description - Biennial flowering herb resembling a yellow Queen Anne's Lace, growing to 5 feet tall.

CAUTION: This plant contains phototoxic sap which can cause rashes and/or burn skin when exposed to the sun.

Origin - Introduced from Europe.

Habitat - Along roadsides, pastures, and fields.

Control - Small plants can be dug up. A broadleaf selective herbicide is effective to spot-spray rosettes or pre-mature adult plants in early summer.

European frog-bit (Hydrocharis morsus-ranae)

Description - Perennial, free floating aquatic species with kidney/heart shaped leaves. Resembles miniature lily pad the size of a fifty cent piece.

Origin - Introduced from Europe as aquatic garden ornamental, escaping cultivation in the 1930's.

Habitat - Slow moving rivers, sheltered inlets, ponds. This plant can be found free-floating or rooted in shal low water substrate.



Control - Small infestations can be hand-pulled, dried, and landfilled. Several experimental aquatic herbicides are being tested for large infestations.