



**Douglas County
Land & Water Conservation Department**

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Barkers Island Yellow Flag Iris EDRR by Douglas County

2021 Summary

As a part of the EDRR Grant for early detection mapping and rapid control of Yellow Flag Iris (*Iris Pseudacorus*) through the Wisconsin DNR, the Douglas County AIS Coordinator (Zach Stewart) carried out mapping and control activities during the 2021 field season. Significant infestations were mapped, including at least 69 individual areas of infestation ranging in size from smaller individual plants up to large colonies >1m² in size (Fig. 1). 12 native blue flag iris plants were also documented, particularly around the Northwest and Southeast tips of the island.

The Douglas County AIS Coordinator recorded GPS locations for each native and invasive Iris plant and created a map to inform continued control / population management efforts (Fig. 2). Yellow Iris are widely distributed around the island with the most severe infestations concentrated around National Estuarine Research Reserve and Marina docks on the Southwest facing shoreline of the island. The only area of the island that is notably free of Yellow Iris is a section of the Northeast facing shoreline where neither Invasive Yellow Flag Iris nor Native Blue Iris were documented.



Figure 1. Significant infestations of Yellow Flag Iris were documented around the shoreline of Barkers Island.

The AIS Coordinator created an educational mailing informing landowners and residents of Barkers Island of the presence of harmful invasive species and offering assistance and information for those interested in helping to combat the problem. The Douglas County Conservationist and other County staff assisted in printing and distributing these mailings to landowners on the island. The educational mailing is included here in Appendix 1.



Figure 2. EDRR map of Barkers Island indicating documented Yellow Flag Iris and Native Blue Iris as well as 2021 manual control area

Manual control of Yellow Flag Iris was carried out on the island using the both the cutting and digging techniques. Where possible, plants were dug out with a shovel including as much of the root mas as possible (Fig. 3). Yellow Flag Iris plants store much of their metabolic energy in the pink fleshy rhizomes or “root mass”. Fully removing as much of this rhizome as possible is extremely labor intensive but leads to more effective control. The full digging technique was employed wherever possible, especially in the sandy shorelines that comprise the southern part of the 2021 control area. In some areas, particularly the rip-rap shoreline near the National Estuarine Research Reserve, digging out the full root mass with hand tools was not possible, as the plants are growing from a substrate of large boulders. In this area, rhizomes were cut where possible, and above ground plant material (including seed pods) were cut and removed. Cutting seed pods is not as damaging to the plant as full removal, but it does help curtail the growth of the plant and limit the further spread of Yellow Flag Iris to adjacent areas.



Figure 3. Manual digging of Yellow Flag Iris from rocky substrate on Barkers Island (left), and characteristic fleshy rhizomes of Yellow Flag Iris severed in digging process (right).

After manual control consisting of digging or cutting, all invasive plant material was bagged in heavy duty contractor bags and disposed of by hauling to the City Dump or disposing with permission at the National Estuarine Research Reserve dumpster (Fig. 4). Approximately 1,200 pounds of invasive Yellow Flag Iris were removed from Barkers Island. Overall, EDRR mapping, public outreach, and preliminary control work were very successful on Barkers Island. The City of Superior provided important collaboration and financial support to enable this AIS project, and the County is grateful for the ongoing professional partnership and support. Manual control work in 2021 took place on City owned parcels on the Island. The significant size of the Yellow Flag Iris population discovered during this project will require further control beyond the 2021 EDRR Grant in order to achieve effective long-term population management and prevent further spread. It is recommended that further resources be secured to allow continued EDRR response and/or population control in the future.



Figure 4. All invasive plant material was bagged in heavy duty contractor bags and disposed.

Invasive Plant Spreading on Barkers Island

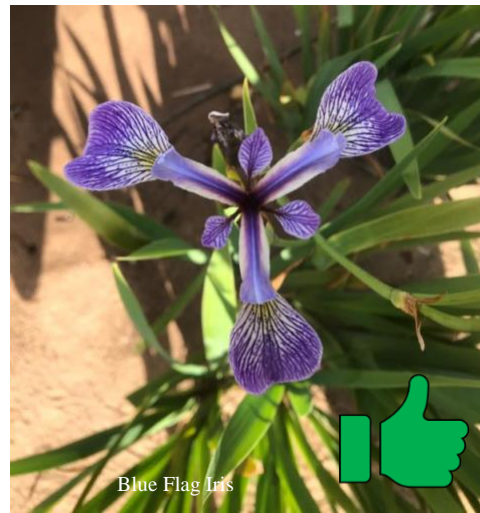
Yellow Flag Iris is an ecologically harmful invasive species that comes from Eurasia. The Yellow Flag Iris is spreading aggressively in our area and crowding out valuable native Wisconsin species, such as the Blue Flag Iris. If you work, visit, or own property on Barkers Island keep your eyes open for these plants: you can help your local ecosystem by eradicating invasive Yellow Flag Iris and protecting native Blue Flag Iris and other beneficial native plants! For help or questions about controlling your Yellow Iris contact the Douglas County AIS Coordinator at (360) 317-4502 or by email at zach.stewart@douglascountywi.org.

Invasive Yellow Flag Iris



- Large yellow flowers in June
- Tall sword-shaped green leaves
- Harmful invasive species
- Rooted with thick pink-colored rhizomes
- Spreads aggressively if not removed

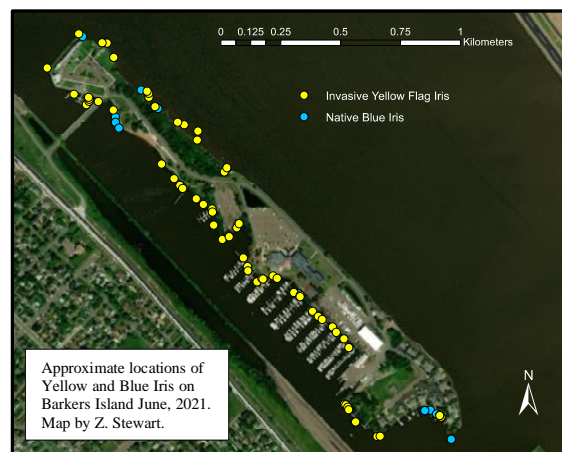
Native Blue Flag Iris



- Large purple/blue flowers in June
- Beneficial native species
- Provides good habitat for native wildlife
- Protect these if they grow on your land!

How to get rid of Yellow Iris

- Small infestations can be controlled by digging out complete root system and safely disposing in landfill or burning
- Serious infestations may need chemical herbicide. Herbicide application near water can only be carried out by a certified pesticide applicator. Reach out using contact info below for help and more information
- Simply mowing every year or cutting and safely disposing of seed heads can gradually reduce infestation and limit the spread



For more information, visit:

<https://dnr.wisconsin.gov/topic/Invasives/fact/YellowFlagIris.html>

Or contact: Zach Stewart, Douglas County AIS Coordinator
zach.stewart@douglascountywi.org