Invasive species: a species that is non-native to the ecosystem under consideration and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.

-President's Executive Order 13112, 1999

When a plant is introduced to a new area, it leaves its natural enemies behind. Plants in new environments tend to become invasive because their populations are no longer controlled by insects, fungi, disease, grazing animals and competition from other plants. Invasive plants tend to be highly adaptable and are generally successful in a wide variety of habitats. When invaders move in, they do not share. They take up light and nutrients, eliminating native plant species. Native plant diversity is evidence of a healthy habitat. Only a small fraction of the hundreds of non-native plants that have evolved elsewhere and brought to Michigan and to Belle Isle are invasive. The few that are, however, can be very aggressive and spread rapidly once established. Early detection and treatment are very important. Below is a partial list of invasive plants on Belle Isle.

## Be on the lookout!

How many of these invasive plants can you spot on the island? Use the map and explore!

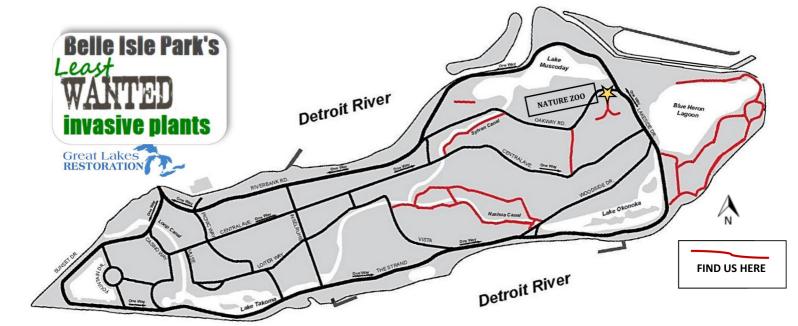
These invasive plants can be found on trails, fences, and along roadways in the park.

Check them off as you see them.



How many did you find? \_\_\_\_\_ Can you spot these invaders in your neighborhood?

Funding for this invasive removal project is provided by the U.S. Environmental Protection Agency through a Great Lakes Restoration Initiative grant. Brochure designed by Tahrima Khanom and Melvadean Pearson. Sources: Michigan Natural Features Inventory: Invasive Species—Best Control Practices fact sheets dated 2/2012; Michigan Natural Features Inventory's A Field Guide to Invasive Plants of Aquatic and Wetland Habitats for Michigan; and, Michigan Natural Features Inventory's A Field Identification Guide to Invasive Plants in Michigan's Natural Communities. Photo Credits: Tahrima Khanom, Leslie J. Mehrhoff, Chris Evans, Jan Samanek, Phyllis Higman, John M. Randall, Michigan Department of Natural Resources and Michigan Sea Grant. For more information on these invasive plants, visit the Michigan Natural Features Inventory at:



- **1. EURASIAN HONEYSUCKLE** (Lonicera): My flower is like a small trumpet and comes in several colors in the spring. It has a honey-like sweetness that gives me my name. I spread out like a fountain from my base and my bark has long lines. I shade out all other plants.
- **2. COMMON BUCKTHORN** (*Rhamnus cathartica*): I am a pretty little bush and can grow to be tree-like. Birds eat my many berries that pass through quickly, leaving the birds hungry, and helping me spread. My leaves are shiny and oval and my bark is brown with white dashes. I have thorns that grow larger with age.
- **3. PURPLE LOOSESTRIFE** (Lythrum salicaria): I am beautiful and tall. I look like a native plant but I am not. My purple flower spikes produce thousands of seeds and help me dominate any wet areas along roads or at water's edge. I will ruin a wetland because I soon become the only plant in existence where I live.
- **4. COMMON REED** (*Phragmites australis subsp. australis*): Some call me "phrag." I have many seeds and I love to grow tall and dominate an area. I prevent other plants from living nearby. I send rhizomes deep underground and stolons on top of the ground, shooting up a new plant about every twelve inches. I will invade anything I touch on land or in water. I often replace cattails and anything else that gets in my way.
- **5. REED CANARY GRASS** (*Phalaris arundinacea*): People think I am a lovely grass, but they don't know that I will prevent anything else from living where I live. I am difficult to get rid of and like to dominate large areas where I can get sunlight.
- **6. PRIVET** (*Ligustrum vulgare*): I am green and have small leaflets, white flowers, and many berries that form in clusters. In the city I may be a hedge in someone's yard. However, in the forest I make a thicket that is difficult to walk through.
- **7. COMMON PERIWINKLE** (Vinca minor): In the spring, I have a pretty blue flower on my small vine-like stems. You will find my shiny dark waxy leaves as a ground cover in most gardens. I make a mat about four inches thick. Nothing grows through me. Mammals will not eat me because I will make them sick. That means I can spread, covering the forest floor untouched by animals. I am of no benefit to any forest creatures.
- **8. MULTIFLORA ROSE** (Rosa multiflora): My flower is white in spring. I grow massively with many stems shooting out from one place. You will know me by the "feathery piece" connecting my leaves to my stem. Wherever I touch the ground I root again and start another one of me. If you try to walk where I am established, you will change your mind. My stout, down-curved thorns (unlike most native roses) go through clothing. Ouch!
- **9. NARROW-LEAVED CATTAIL** (*Typha angustifolia*): My slender leaves make me attractive. Otherwise, most folks would not know that I am not my cousin, the native cattail, which has a much broader leaf and different "solid tail." My tail is separated. I can take over in wet areas. Common Reed is my enemy and often replaces me.

- 10. ORIENTAL BITTERSWEET (Celastrus orbiculatus): People sometimes make a wreath of me because the orange and red berries along my vine are so pretty, unlike my gentle cousin, native bittersweet, who has berries only at the tips of her vine. I will climb on anything near me, dead or alive. I am much like a boa constrictor and can squeeze the bark of another plant so hard that it cannot get nutrients. We call this girdling. My cousin, however, does not kill others. I start out as a small green vine and if left alone become very woody, large and dangerous to other plants.
- **11. TREE-OF-HEAVEN** (Ailanthus altissima): I am named this because I grow very skinny and straight up as if I am reaching for the heavens. You have seen me in the city many times growing out of foundations, not being particular where I grow. I also produce many seeds and I out compete other trees. I smell of peanut butter when my young limbs are broken off; my large leaf scar looks much like a smiling giraffe!
- **12. CANADA THISTLE** (Cirsium arvense): Pull me out of the ground to get rid of me but make sure you wear gloves because I like to poke your fingers. I also leave a little piece of my root in the ground so I can grow more of me. I am a single plant attached to others underground and I have a very pretty purple flower that turns to white fluff. The wind carries my seed wherever it blows.
- 13. GARLIC MUSTARD (Alliaria petiolata): Crush my leaves and I smell like garlic. I am a light green plant that is easily pulled. I start out as a sweet rosette with soft edges the first year. The second year, I shoot up a tall stalk with triangular leaves and have many lovely small white flowers that go to seed. I escaped from a vegetable garden, so I am edible. I love to populate the entire woodland floor.
- **14. JAPANESE BARBERRY** (Berberis thunbergii): I am a bush that can get out of control. I multiply very quickly in the forest through my many berries. If you walk too close you will find that I will scratch you. When I am bigger, the stems connecting my leaves are red. My leaves can be green or red.
- **15. SPOTTED KNAPWEED** (Centaurea stoebe): I have a light purple flower that is very pretty though my body is scrawny. My deep taproot makes me difficult to pull. I put toxins into the ground to prevent other plants from living near me, making restoration difficult. My seed head is interesting. Wear gloves when you pull me.
- **16. JAPANESE KNOTWEED** (Fallopia japonica): I have heart-shaped leaves that are flat across the top. I come up as a single stem when I first appear. When I am bigger, the stems connecting my leaves are sometimes a beautiful red color. Then I develop a larger hollow stalk and grow tall with trailing small white flowers.

As invasive plants on Belle Isle, we are targeted by a Great Lakes Restoration Initiative project to reduce our numbers. We will see if you can find us this year, next year, and beyond.