








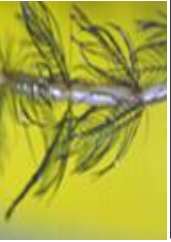


Invasive Plant Species (Ottawa County)

| Common Name | Scientific Name | Overview | Threat |
|---|----------------------------|--|--|
|  <p>Tree of Heaven</p> | <i>Ailanthus altissima</i> | Tree of Heaven is a rapidly growing deciduous tree in the mostly tropical quassia family. (Simaroubaceae). Mature trees can reach 80 feet or more in height. It was first introduced to America by a gardener in Philadelphia, PA in 1784, and by 1840 was commonly available from nurseries. | This plant is a prolific seed producer, grows rapidly, and can overrun native vegetation. Once established, it can quickly take over a site and form an impenetrable thicket. It also produces toxins that prevent the establishment of other plant species. The root system is aggressive enough to cause damage to sewers and foundations. |
|  <p>Garlic Mustard</p> | <i>Alliaria petiolata</i> | Garlic Mustard is an exotic invasive plant from Europe that invades woodland habitats in North America and impacts forest biodiversity. | Dense strands of garlic mustard in the spring threaten spring blooming ephemerals like spring beauty, trilliums and trout lilies. There are also negative impacts on timber species. |
|  <p>Japanese Barberry</p> | <i>Berberis thunbergii</i> | Japanese Barberry is a dense, deciduous, spiny shrub that grows 2 to 8 feet high. This plant was introduced to the U.S. as an ornamental plant in 1875. Due to its ornamental interest, this plant is still widely propagated and sold at nurseries for landscaping purposes. | This plant forms dense strands in natural habitats and alters soil pH, nitrogen levels, and biological activity. Once established, this plant displaces native plants and reduces wildlife habitat and forage. |
|  <p>Canada Thistle</p> | <i>Cirsium arvense</i> | Canada Thistle is an herbaceous perennial with stems 1½-4 feet tall, prickly leaves and an extensive creeping rootstock. It grows in barrens, glades, meadows, prairies, fields, pastures, and waste places but does best in disturbed upland areas. It was introduced to the United States, probably by accident, in the early 1600s. | This thistle crowds out and replaces native plants, changes the structure and species composition of natural plant communities, and reduces plant and animal diversity through shading, competition for soil resources and possibly through the release of chemical toxins poisonous to other plants. |
|  <p>Spotted Knapweed</p> | <i>Centaurea maculosa</i> | Spotted knapweed was introduced to North America from Europe as a contaminant in alfalfa and possibly clover seed, and through discarded soil used as ship ballast. | This plant out-competes native plant species, reduces native plant and animal biodiversity, and decreases forage production for livestock and wildlife. This plant may also degrade soil and water resources by increasing erosion, surface runoff, and stream sedimentation. |
|  <p>Autumn Olive</p> | <i>Elaeagnus Umbellata</i> | Autumn olive is a deciduous shrub that can grow to 20 feet in height. The stems, buds and leaves have a dense covering of silvery to rusty scales. It was introduced into the United States in 1830 and widely planted as an ornamental, for wildlife habitat, as windbreaks and to restore deforested and degraded lands. | This plant threatens native ecosystems by out-competing and displacing native plant species, creating dense shade and interfering with natural plant succession and nutrient cycling. Because it is capable of fixing nitrogen in its roots, it can grow on bare mineral substrates. |

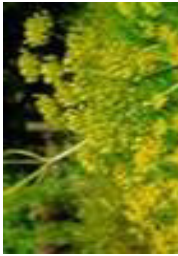


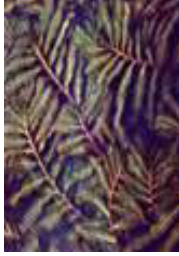


Source: United States Department of Agriculture - Plants Database, Michigan Sea Grant - www.misea.umich.edu, Michigan Natural Features Inventory, National Park Service - Weeds Gone Wild Fact Sheets, Department of Natural Resources

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| Common Name | Scientific Name | | |
|  | <i>Heracleum mantegazzianum</i> | Giant Hogweed is originally from Asia and was introduced as an ornamental plant. This plant is rather large in size, potentially reaching 10 to 15 feet. | The clear, watery sap has toxins that cause photo dermatitis. Skin contact followed by sun exposure produces painful, burning blisters that may develop purplish or blackened scars. |
|  | <i>Leymus arenarius</i> | This plant exhibits thick, blue-green blades and a rigid seed stalk. It can be found in coastal beaches and dune areas. | These plants compete directly with native Lake Michigan dune grasses. |
|  | <i>Lonicera japonica</i> | Japanese honeysuckle is a semi-evergreen vine that often holds its leaves late into winter. Leaves are ovate and 1.5-3.2 inches (4-8 cm) long. White to yellow tubular flowers form in pairs in the leaf axils and occur from May-June. The 2-3 seeded fruits are small and black. | This plant is native to Asia, but was introduced into the United States as an ornamental vine over 100 years ago. It smothers native plants in woodlands and crowds out native species. |
|  | <i>Lonicera maackii</i> <i>Lonicera morrowii</i> <i>Lonicera xbella</i> | Exotic bush honeysuckles are upright, generally deciduous shrubs that range from 6 to 15 feet in height. These plants are shade intolerant and were introduced for use as ornamentals, for wildlife cover and for soil erosion control. | These plants can rapidly invade and overtake a site, forming a dense shrub layer that crowds out native plant species. They alter habitats by decreasing light availability and by depleting soil moisture and nutrients. |
|  | <i>Lythrum salicaria</i> | The Purple Loosestrife is a wetland plant from Europe and Asia. It was introduced to the east coast of the U.S. in the 1800s. It spread throughout the region along roads, canals, and drainage ditches. | This plant forms dense impenetrable strands that are unsuitable for food or nesting sites of native wetland animals. Many rare and endangered wetland plants are also at risk. |
|  | <i>Melilotus alba</i> | This plant is native to Europe and was brought to North America in the late 1600s as a green manure for fields and as forage for livestock. | This plant invades and degrades native grasslands by overtopping and shading native sun-loving plants. |
|  | <i>Myriophyllum spicatum</i> | This plant variety was accidentally introduced to North America from Europe between 1950 and 1980. The Eurasian Watermilfoil spread into Michigan's inland lakes and ponds primarily by boats and waterbirds. | Some of the dangers of this plant include interference with recreational activities, as well as a threat to other native species. The spread of this plant is increased by removing native plant species for beaches, docks, or other landings. |

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|  <p>Wild Parsnip</p> | <i>Pastinaca sativa</i> | This plant grows close to the ground with its leaves averaging six inches in height. A native of Europe and Asia, this plant has escaped cultivation as a root vegetable. | This plant invades slowly, but once population builds, it spreads rapidly and can severely modify open dry, moist, and wet-moist habitats. If the plant juices come in contact with skin in the presence of sunlight, a rash and/or blistering can occur, as well as skin discoloration. |
|  <p>Common Reed</p> | <i>Phragmites australis</i> | Common reed is a tall, perennial grass that can grow to over 15 feet in height. It can be found in tidal and nontidal brackish and freshwater marshes, river edges, shores of lakes and ponds, roadsides, and disturbed areas. | Once introduced <i>Phragmites</i> invades a site and quickly can take over a marsh community, crowding out native plants, changing marsh hydrology, altering wildlife habitat, and increasing fire potential. |
|  <p>Japanese Knotweed</p> | <i>Polygonum cuspidatum</i> | Japanese knotweed is an upright, shrub-like, herbaceous perennial that can grow to over 10 feet in height. It was probably introduced to the U.S. in the late 1800s as an ornamental and has also been used for erosion control and for landscape screening. | This plant spreads quickly to form dense thickets that exclude native vegetation and greatly alter natural ecosystems. It poses a significant threat to stream shoreline, where it can survive severe floods and is able to rapidly colonize. Once established, populations are extremely persistent. |
|  <p>Curly Pondweed</p> | <i>Potamogeton crispus</i> | This plant is present in inland ponds and lakes, as well as the Great Lakes. This plant forms on the surface of the water and usually drops to the bottom by early July. The Curly Pondweed has been present in this area so long that many people do not realize it is exotic. | This plant interferes with aquatic recreation, such as boating, fishing and swimming. It is considered one of the most severe nuisances of all aquatic plants present in Michigan. |
|  <p>Multiflora Rose</p> | <i>Rosa Multiflor</i> | Multiflora rose is a thorny, perennial shrub with arching stems (canes), and leaves divided into five to eleven sharply toothed leaflets. It was introduced to the East Coast from Japan in 1866 as rootstock for ornamental roses. | Multiflora rose is extremely prolific and can form impenetrable thickets that exclude native plant species. This exotic rose readily invades open woodlands, forest edges, successional fields, savannas and prairies that have been subjected to land disturbance. |
|  <p>Narrow-leaved Cat-tail</p> | <i>Typha angustifolia</i> | This plant is found in or near water, in marshes, ponds, and lakes. This plant is widely used for wetland restoration and constructed wetlands for tertiary water treatment. | This plant tends to invade native plant communities when hydrology, salinity, or fertility change. It out-competes native species, often becoming monotypic strands of dense cattails. |

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