

SPOTTED KNAPWEED



Description- Biennial plants with a height up to 6 feet. A single pink-ish purple flower head at end of the stem. The base of the flower is fringed with black tips and short hairs. Grey-green leaves with short think gray hairs.

Cautions- Plants are known to contain toxins that inhibit the growth of neighboring plants found takin over native plants in meadows, pastures and roadsides. Seeds remain viable in the soil for up to eight years.

AUTUMN OLIVE



Description- Autumn Olive is a deciduous shrub that measures 20-30 ft tall. Bark appears to be silver with brownish scales. Leaves are alternate and oval shaped with pointed tips. Leave margins are wavy without teeth.

Caution- This shrub shades out desirable native species and reduced species diversity. It's growing season is much longer that native plants leafing out in early spring and holding leaves until late fall.

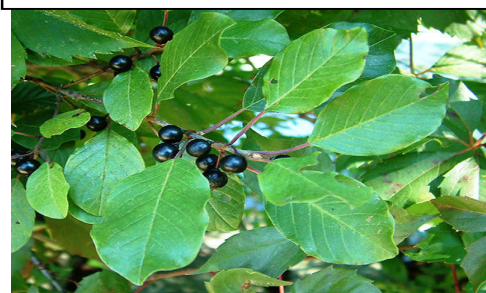
GARLIC MUSTARD



Description- Garlic Mustard is a herbaceous biennial that grows 2-4 Ft tall. Leaves are alternate, triangular with large teeth and measure 2-3' across. Stems and leaves smell like garlic when crushed. Flowers are small, 4-peteled and white in color. Root is a white thin tap root.

Caution- Garlic Mustard invades upland forests, yards and roadsides. It chokes out native plants. This plant also carries antifungal chemical into the soil that disrupts fungi and native plants suppressing their growth., It can re-sprout from the root if only the top of the plant is removed.

COMMON BUCKTHORN



Description-Understory tree with greyish bark and pale horizontal lines. Multiple stems that develop into a single trunk. Opposite leaves that are glossy oval shaped and have tiny teeth. 2-8 small yellow fragrant flowers.

Caution- Common Buckthorn outcompetes with native plants for light. It shades out wild flowers and other understory plants. Preventing natural growth of forest trees and has been known to host agricultural diseases.

GYPSY MOTH



Description- Gypsy Moths at adult stages are present in July and August. Males are brown and tend to fly in a zig zag pattern. Females are white and cream and do not fly. Egg masses are cream colored and found on tree trunks, tree branches and sometimes patio furniture.

Caution- Known as North America's most devastating pests, the Gypsy Moth feeds on the foliage of hundreds of species of plants. When high levels of gypsy moths occur, trees can become completely defoliated. Once defoliated, the tree will die.

ASIAN LONGHORNED BEETLE



Description- Adults are less than 5cm long with shiny black exoskeleton containing white spots. Long black and white antennae are longer than the body. Upper sections of legs are white blue.

Cautions- Asian Longhorned Beetle kills a wide variety of hardwood trees including: maple, elms, willows and birches. Damage includes dime-sized holes in trees from where the beetles crawl out of the wood. Long Horned Beetles are spread through movement of infested tree-based materials.

EMERALD ASHBORER



Description- Adult beetles are dark metallic-green measuring 1/2" long and 1/8" wide. Grubs are flat, cream colored and have wide heads.

Caution- When an Emerald Ashborer infests a tree, the tree dies. They attack Ash trees by feeding on the layer of the tree's trunk that lies just below the surface. In doing this, they cut off the flow of nutrients and water to the tree.

MUTE SWAN



Description- Large aquatic water fowl measuring 49-67 inches in length. Large white plumage with an orange beak bordered with black. A recognizable knob shows on top of the beak.

Caution- Mute Swans build large nests using native vegetation at the edge of a lake. They are strongly territorial birds and will fight for food, shelter and space

QUAGGA MUSSEL



Description- 1-2 inches, laterally compressed shell has alternating brown to tan-ish stripes. Pale brown near the hinge. Falls over when sat on its ventral surface.

Caution- Mussels can colonize soft and hard surfaces creating mats that cover fish, spawning area, docks, boats and motors. Sharp shells pollute swimming areas and beaches. Commercial and sports fishing in the Great Lakes is threatened by the Quagga Mussel. As filter feeders they filter plankton from the water, disrupting the food web from the bottom up.

SEA LAMPREY



Description- Jawless fish measuring 12-20 inches. Grey-blue back with silver and white belly. They have a suction cup mouth with hook-like teeth and a rasping tongue.

Caution- This fish is a parasitic fish, that kills about 40 lbs. of food in its lifetime. One of the most devastating aquatic invasive. They single handedly contributed to the extirpation of lake trout in most of the Great Lakes.

RED SWAMP CRAYFISH



Description- Aquatic crustacean up to 5 inches long (including claws). Dark red body and claws with bright and spiky red bumps. Black wedge shaped stripe on underside.

Caution- Red Swamp crayfish has a diverse diet including: insects, snails, fish, amphibians and plants. This diverse diet can impact an ecosystem. They have been used as food in Louisiana (crawdads), where they are native, but here they compete aggressively with the native crayfish for food and space. In addition, Red Swamp Crayfish can carry fungus plaque and host parasites.

JAPANESE BEETLE



Description- Adult- 1/3-1/2-inch oval beetle. Metallic green with bronze wing covers. Five patches of white hairs on each side of the abdomen. Grub is covered with long brown hairs and short blunt spikes. The head is yellowish-brown.

Caution- Japanese Beetle causes damage at all levels of development. Both adult and larvae cause damage to the plant by feeding on the leaf surface resulting in skeletonization. Grubs feed on the roots of grasses causing severe damage to pastures, lawns and golf courses. Damaging the roots reduces the plants ability to take in water resulting in dead areas. It also is a pest to several fruit and crop plants with a host range of more than 300 species.

ZEBRA MUSSELS



Description- small size (1-2 inches) black to brownish shell with alternating dark and light stripes (Zebra like). Usually found in clusters of individuals.

Caution- Zebra Mussels attach to hard surfaces generally in shallow waters (6-30 feet). They are a serious problem and can cover boat hulls, motors, piers and drain pipes. Larvae can be drawn into boat motors and take over the interior of the engine. They disrupt the aquatic food web of native fish and smother out native clams and crayfish.

WATERMILFOIL



Description- Feathery long stemmed branches near the water surface. Forms thick mats in shallow water. Green leaves with 12-21 thin leaflets. Small reddish flowers grow above the water in the midsummer.

Caution- Large amounts of watermilfoil take over shallow areas of lakes and can interfere with fishing, boating, hunting and swimming. Plants can tangle on boat propellers. They can crowd out native plants and impairs the ability for some fish to spawn. It also creates a breeding ground for mosquitoes.

PHRAGMITES



Description- Perennial grass with rough stems that grow up to 15 feet. Leaves are blue-green and leaf sheaths are tight on a dull/tan stem. Flowers are bushy purple or gold branching clusters of flowers.

Caution- Phragmites can grow up to 15 feet tall. They grow extremely dense in single-species thickets. These thickets can be as large as 1 square kilometer in size.

Phragmites reduce access for fishing, hunting water fowl and swimming. They also block shoreline views.

PURPLE LOOSESTRIFE



Description- Multiple ridged or square woody stemmed plants. Stems are often fuzzy in appearance. Leaves are opposite stalkless rounded at the base. Magenta-purple colored flower that form a spike. Flowers have 5-7 petals.

Caution- Purple Loosestrife out competes and replaces native grasses, sedges and other flowering plants. It adapts easily to disturbed wetlands and its seeds can remain viable after 2-3 years underwater. Purple Loosestrife is responsible for causing a loss of nearly 500,000 acres of wetland each year.

EUROPEAN FROGBIT



Description- Free floating and can form impenetrable mats at the surface. They have heart shaped leaves that are leathery and spongy with purplish red undersides. They produce a single three peddled white flower about one inch above the water.

Caution- European Frogbit can blanket shallow ponds, marshes and shorelines. These dense layers of plants and hanging roots reduce habitat for native and game fish. This interferes with fishing, boating, hunting and swimming. It also inhibits the growth of native plants.

FERAL SWINE



Description-a wild pig, also known in Michigan as Russian boar. May be descended from pigs brought to North America by the Spanish in Florida. First appeared in Michigan in the 1980's. They live in mixed forest and agricultural fields.

Cautions- Their diet includes crops, bird and reptile eggs, insects and insect larvae, fawns and young livestock, grasses, seedlings, nuts, roots, and tubers. They may attack humans and can transmit serious diseases. They compete with deer, bear, turkey, squirrel and waterfowl.

ASIAN CARP



Description- Large fish- up to 41 in, 60 lbs. Bright silver sides and a scaleless head, large upturned mouth, eyes set forward looking downward below the midline of the body.

Caution- Asian Carp can leap up to 10 feet out of the water. This poses a threat of serious injury to anglers and boaters. They can reach high population numbers and dominate fish communities. Feeding on plankton, they reduce the amount of food for native fish.

NORTHERN SNAKEHEAD



Description- cylindrical body- up to 47 inches long. Dark brown to tan color with irregular blotches. Long single dorsal fin and long anal fin. Large scales on head give it a "snakehead" appearance. Jaws have canine-like teeth.

Caution-The Northern Snakehead is a voracious top- level predator that feeds on native fish. They have few natural enemies and once established are very difficult to eradicate. Can survive in water with very low oxygen.