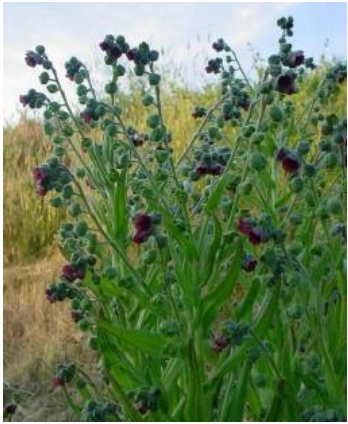


Houndstongue: *Cynoglossum officinale*



Leafy plant with many flowering stalks, 1.5-3 feet tall. Leaves are large and fuzzy. May develop up to 2,000 seeds per plant. The seeds are in clusters of 4 and are covered with short barbs. This makes them attach

easily to clothes and animal fur. This plant is becoming more abundant in the Upper Peninsula. Check your boots and clothes frequently to avoid spreading this plant in Wilderness areas. Pets can also easily transport seeds.



Leafy Spurge: *Euphorbia esula*



Yellow-green flowers on smooth stems that produce a milky white sap when broken. The plant is typically 1-3 feet tall. The leaves are small and oval to lance-shaped. This plant is an aggressive invader and can completely take over large areas of open land. The roots

can extend many feet underground, making it extremely difficult to eradicate. Leafy spurge is a new invader to the Upper Peninsula, and you can help keep our infestations small by reporting new ones to the Forest Service.



Effects of Invasive Species :

- ⇒ Loss of biodiversity and decline of threatened and endangered plants and animals, as native species are replaced by invader species.
- ⇒ Harm to wildlife and fish habitat by loss of native food sources and nesting habitat.
- ⇒ Thick beds of invasive aquatic plants impede boat passage and pose a risk to swimmers.
- ⇒ Invasive plants such as marsh thistle and Japanese barberry form spiny thickets and impede recreation and hunting access.
- ⇒ Streamside invasive plants can clog streams and rivers, reducing fishing opportunities and potentially reducing water quality.

Help protect Wilderness from invasive species!

- ⇒ Carefully inspect and clean all seeds, soil, and debris from your clothes, boots, and equipment before entering Wilderness.
- ⇒ Inspect your fishing equipment and remove any plants and animals both before it goes in the water and after it comes out. Never release any live bait!
- ⇒ Avoid camping in weed-infested areas.
- ⇒ Visitors to Wilderness are welcome to participate in volunteer weed-pulling events. Contact the Hiawatha National Forest for more information.
- ⇒ More information on how to identify these invasive plants is available at the District Offices - please be certain of your plant ID skills before attempting to remove plants.
- ⇒ Please report invasive plants in wilderness!

For more information, or to report sites of invasive plants, please contact:

Hiawatha National Forest
2727 N. Lincoln Rd. Escanaba, MI 49829
(906) 786-4062

<http://www.fs.fed.us/r9/forests/hiawatha>
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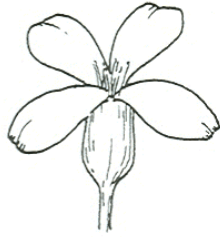
Invasive Plants in Wilderness Hiawatha National Forest



Non-Native Invasive Plants are not indigenous to an area and cause harmful effects to the natural environment, economy, or human health. Invasive plants reproduce rapidly and can overrun natural areas.



Garlic mustard: *Alliaria petiolata*



Biennial herb, 1 to 4 feet high, with small white flowers and narrow tubular fruits. The leaves are heart-shaped, coarsely toothed, and smell

like garlic when crushed. This is a highly invasive understory herb that out competes spring wildflowers. Garlic mustard is not currently known to occur in Wilderness areas of the Hiawatha National Forest. Please watch for this species, and report any new sites to the Forest Service!

Japanese barberry: *Berberis thunbergii*



Small shrub, 2 to 4 feet high, with yellow flowers,

small spoon-shaped leaves, and short sharp spines. Egg-shaped fruits are green when young and turn red in the fall. Japanese barberry can form spiny, impenetrable thickets in forests and openings. This shrub is planted for home landscaping, and birds spread the seeds to remote locations. Please report sightings of this shrub and help slow its spread.



European swamp-thistle: *Cirsium palustre*



Spiny, narrow plant, to five feet tall. A prolific seeder, this plant is becoming abundant in the Upper Peninsula. Other non-native thistles that may be in Wilderness include Canada thistle and bull thistle. European swamp thistle can be recog-

nized by its spiny leaves and stems, clustered small heads with purple flowers, and no spines on the flower heads (unlike bull thistle). Cleaning your boots and equipment before you enter a Wilderness area can help keep this plant from spreading.



Eurasian water-milfoil: *Myriophyllum spicatum*



This submersed aquatic plant forms thick weed beds, and can harm lake quality and fish habitat. Eurasian water-milfoil typically has 12 to 21 pairs of leaflets on each leaf, while the similar native northern water-milfoil usually has 5 to 10 pairs of leaflets per leaf. A single segment of stem and leaves can take root and form a new plant, so fragments clinging

to boats and trailers spread this weed. Check your boating and fishing equipment to prevent the spread of this aquatic invasive plant.



Purple loosestrife: *Lythrum salicaria*



Square-stemmed perennial, 3 to 5 feet tall. The purple flowers have 5 to 7 petals (unlike the native fireweed, which has 4). Purple loosestrife has escaped cultivation and is found along stream banks, lakeshores, wet meadows, and ditches. A single plant can produce 2.5 million seeds, which can be transported great distances by humans, animals, water, and wind. Lakeshores and stream

banks are vulnerable to invasion by this species, so watch for and report sightings.



Spotted knapweed: *Centaurea stoebe*



Much-branched wiry stems with pinkish-purple, thistle-like flowers and leaves that are covered with downy grayish hairs. Since its introduction from Europe, this species has become problematic and widespread. It is unfortunately common along roadsides in the Upper Peninsula, and we hope to keep it from becoming further established in Wilderness.

Other invasive species

In addition to the eight invasive plants shown here, please watch for sweetclovers, exotic bush honeysuckles, buckthorns, Japanese knotweed, or any other non-native invasive species. For more information, visit www.fs.fed.us/r9/forests/hiawatha