



## U.S. Fish & Wildlife Service



*The Pitcher's thistle is found in Illinois, Indiana, Michigan, and Wisconsin.*



## Pitcher's Thistle

Pitcher's thistle is a *threatened species*. Threatened species are animals and plants that are likely to become endangered in the foreseeable future. *Endangered species* are animals and plants that are in danger of becoming extinct. Identifying, protecting and restoring endangered and threatened species is the primary objective of the U.S. Fish and Wildlife Service's endangered species program.

### What is the Pitcher's thistle?

**Scientific Name** - *Cirsium pitcheri*

**Range** - The Pitcher's thistle is a native thistle that grows on the beaches and grassland dunes along the shorelines of Lakes Michigan, Superior, and Huron. It is now found in Indiana, Michigan, and Wisconsin and in Ontario Canada. Pitcher's thistle was extirpated from Illinois but has been reintroduced in Lake County.

**Appearance** - The Pitcher's thistle grows for five to eight years before it flowers. Its non-flowering form is a rosette or cluster of silvery leaves and its flowering form typically has one stem with many branches. The entire flowering plant may grow 3 feet tall. Cream or pink flowers grow at the end of branches and from the leaf axils. Leaves are finely and deeply lobed and may be one foot long. The stems and leaves of both the flowering and non-flowering forms are covered with white hairs that give the plant a woolly white or silvery appearance. These hairs are an adaptation to its beach environment and help the plant retain water and reflect the sun's strong rays. Spines are found along the edges of leaves near the base and at the tips of some of the lobes. Both non-flowering and flowering plants have a long taproot, up to 6 feet long.

**Habitat** - Pitcher's thistle grows on the open sand dunes and low open beach ridges of the Great Lakes' shores. It is most often found in near-shore plant communities but it can grow in all nonforested areas of a dune system.

## What is the Pitcher's thistle? (cont'd.)

**Reproduction** - The Pitcher's thistle blooms and sets seed once during its lifetime, after a five to eight year (i.e., juvenile) non-flowering period. It then blooms from June to September. The blooms are pollinated by insects. Thirty species of insects, mainly bees, have been observed visiting Pitcher's thistle blossoms. After the seeds mature, they fall or are windblown and germinate the following spring and early summer. Pitcher's thistle tends to colonize open areas or areas with low plant cover.

## Why is the Pitcher's thistle threatened?

**Shoreline Development** - Residential, condominium, and marina development along with associated landscaping directly eliminates Pitcher's thistle and its habitat within the footprint of the development. Such development also fragments remaining populations and dune habitats.

**Road Maintenance and Construction** - Construction of coastal roads removes and fragments sand dune habitat, alters dune processes, provides access for destructive recreational activities, and spurs shoreline development.

**Shoreline Recreation Activities** - People are drawn to shorelines for their beauty and recreational opportunities so the remaining shoreline areas with dune habitat are often also public use areas. Hikers and Off Road Vehicles (ORVs) trample Pitcher's thistle which harms or destroys the plants. ORV traffic in dunes also causes erosion which creates unstable areas where it's difficult for plants to take hold. Pitcher's thistle and its dune habitat are also destroyed for the creation and maintenance of public beaches.

## What is being done to prevent extinction of the Pitcher's thistle?

**Listing** - Pitcher's thistle was added to the List of Endangered and Threatened Wildlife and Plants on July 18, 1988.

**Landowner Contacts** - Michigan and Wisconsin have landowner contact programs to educate private and public property owners about this species needs and ways that it can be conserved.

**Project Planning** - In areas where the Pitcher's thistle is found it is considered during project planning for federally funded or authorized projects such as marina development and road construction. Means of avoiding or minimizing harm to the species is often possible when it is considered during project planning.

## What can I do to help prevent the extinction of species?

**Learn** - Learn more about the Pitcher's thistle and other endangered and threatened species. Understand how the destruction of habitat leads to loss of endangered and threatened species and plant and animal diversity. Tell others about what you have learned.

**Plant Natives** - Use native plants in landscaping and gardening and avoid the use of invasive plants that have been imported from other countries, such as purple loosestrife, dames rocket, and the shrub honeysuckles.

**Conserve** - When recreating in coastal areas, drive vehicles only where authorized and when hiking stay on established or authorized footpaths to avoid harming rare plants like Pitcher's thistle and damaging fragile natural dune areas.