### Cirsium arvense
(Canada thistle)

<table>
<thead>
<tr>
<th>Common Name(s)</th>
<th>Full Scientific Name</th>
<th>Family Name Common</th>
<th>Family Scientific Name</th>
<th>Images</th>
<th>Synonyms</th>
<th>Description</th>
<th>Similar Species</th>
<th>Reproductive/Dispersal Mechanisms</th>
<th>Distribution</th>
<th>History of Introduction in New England</th>
<th>Habits in New England</th>
<th>Threats</th>
<th>Early Warning Notes</th>
<th>Management Links</th>
<th>Documentation Needs</th>
<th>Additional Information</th>
<th>References</th>
<th>Data Retrieval</th>
<th>Maps of New England Plant Distribution</th>
</tr>
</thead>
</table>

**COMMON NAME**

Canada thistle

**FULL SCIENTIFIC NAME**

*Cirsium arvense* (L.) Scop.

**FAMILY NAME COMMON**

Aster family

**FAMILY SCIENTIFIC NAME**

Asteraceae

**IMAGES**

- Flowers-white morph
- Incursion
- Close-up of flowers
- Flowers
- Incursion
Habit

Leaf close-up

NOMENCLATURE/SYNONYMS

Synonyms: *Carduus arvensis* (L.) Scop.  
*Cirsium incanum* (Gmel.) Fisch.  
*Cirsium setosum* (Willd.) Bess. Ex Bieb.  
*Serratula arvensis* L.

DESCRIPTION

Botanical Glossary

*Cirsium arvense* is a rhizomatous perennial that grows 30 cm-1.5 m (1-5 ft.) tall. The roots of this plant can grow deep into the ground. The leaves are dark green and lanceolate or oblong-lanceolate. They are mostly glabrous above, but their undersides have short, white hairs. They may be pinnatifid and very prickly. The basal leaves can be 12-20 cm (5-8 in.) long. The leaves are usually sessile, but can be slightly clasping. In general, the leaf characteristics are variable across several different varieties and subspecies. The stems of *Cirsium arvense* do not have conspicuous spines.

The plants are polygamo-dioecious, thus there are male and female plants. The female inflorescences are flask-shaped, 1-1.5 cm (0.4-0.6 in.) in diameter, and 1-2 cm (0.4-0.75 in.) tall. The female flowers have a fragrance, while the male flowers do not. The male flowers are more globose in shape than the female flowers and are smaller. The flowers are usually purple in color, but can be pink or white. The plant is in bloom from June to August. The fruits (achenes) are tiny, 2-3 mm (0.1 in.) long and about 1 mm (0.04 in.) in diameter, and have a white to light brown pappus attached.


SIMILAR SPECIES

*Carduus acanthiodes* L. (plumeless thistle)  
*Carduus crispus* L. (welted thistle)  

The main difference between *Carduus acanthiodes, Carduus crispus* and *Cirsium arvense* is that the two *Carduus* species are both non-rhizomatous biennials while *Cirsium arvense* is a perennial.
**REPRODUCTIVE/DISPERSAL MECHANISMS**

*Cirsium arvense* spreads primarily by rhizomatous vegetative reproduction. Reproduction by seed is secondary. Although the seeds have pappus, most of the time it breaks off leaving the seed to fall close to the plant. The small percentage of seeds that remain attached to the pappus may be dispersed by wind, occasionally over a considerable distance. Water dispersal is also possible.

**DISTRIBUTION**

*Cirsium arvense* is native to Europe; it most likely originated from southeast Europe and the eastern Mediterranean, but it has been so widespread for so long that it is difficult to establish its true native range. It presently has a global distribution between 37 and 59 degrees North latitude. It is widespread in all U.S. states and Canadian provinces.

**HISTORY OF INTRODUCTION IN NEW ENGLAND**

*Cirsium arvense* was introduced in the northeast sometime early in the 17th century. It was declared a noxious weed in Vermont by 1795. By 1918 it was on noxious weed lists in 25 northern states in the U.S.

**HABITATS IN NEW ENGLAND**

Abandoned Field
Abandoned Gravel Pit
Agricultural Field
Edge
Open Disturbed Area
Pasture
Railroad Right-of-Way
Roadside
Utility Right-of-Way
Vacant Lot
Yard or Garden

*Cirsium arvense* is most commonly found in agricultural and disturbed sites, or sites that are undergoing restoration. It is shade intolerant and therefore is rarely found within wooded sites, except in clearings. It is found in some dry, sandy sites, but more commonly on the edges of wet habitats such as stream banks and lake shores. In the western and northern U.S. it presents a significant problem in prairie and riparian habitats.

**THREATS**

*Cirsium arvense* is difficult to remove through mechanical means; the entire rhizomatous system of roots must be removed. *Cirsium arvense* directly competes with native vegetation; it can reduce
species diversity, alter habitat structure, decrease crop yields and reduce forage for pasture.

**MANAGEMENT LINKS**

- Illinois Natural History Survey
  General description and management guidelines

- Virginia Native Plant Society

- Plant Conservation Alliance

- The Nature Conservancy

**DOCUMENTATION NEEDS**

- **Documentation required**: A photograph of the habit or inflorescences.
- **Best time for documentation**: Summer, fall.

**ADDITIONAL INFORMATION**

- Integrated Taxonomic Information System
  Taxonomic information about the species

- The PLANTS Database
  General information and map

- The Nature Conservancy
  Extensive description, biology and control information

- Plant Conservation Alliance
  Description and control information

- Illinois Nature Preserves Commission
  Photograph, description and control information

- Wisconsin Department of Natural Resources
  Description, biology and control information

- Ohio Perennial and Biennial Weed Guide
  Photographs and description

- Virginia Native Plant Society
  Factsheet and control information

**REFERENCES**


Moore, R.J. 1975. The biology of Canadian weeds. 13: Cirsium


DATA RETRIEVAL

Select a task by clicking the radio button and then click "Submit Selection."

- Formatted display as table
- Export as comma-delimited text file

Submit Selection

MAPS OF PLANT DISTRIBUTION IN NEW ENGLAND

Select a study area by clicking the radio button and then click "Submit Selection."

- The whole New England area
- One or more states
- One or more counties
- One or more towns (county sub-divisions)

Submit Selection

:: Site Map