Catalog of Species Search Results

:: Catalog of Species Search

Lepidium latifolium

(Tall whitetop
Tall pepperweed
Perennial pepperweed
Giant whiteweed
Perennial peppergrass
Slender perennial peppergrass
Broadleaf pepperweed
Ironweed)

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

COMMON NAME

Tall whitetop
Tall pepperweed
Perennial pepperweed
Giant whiteweed
Perennial peppergrass
Slender perennial peppergrass
Broadleaf pepperweed
Ironweed

FULL SCIENTIFIC NAME

Lepidium latifolium L.

FAMILY NAME COMMON

Mustard family

FAMILY SCIENTIFIC NAME

Brassicaccae

IMAGES


Habitat


Incursion


Basal rosettes


Close-up of flowers


Incursion


Close-up of Fruit

NOMENCLATURE/SYNONYMS

Synonyms: *Cardaria latifolia* (L.) Spach

DESCRIPTION

Botanical Glossary

Lepidium latifolium is an herbaceous perennial that can grow up to 1.5 m (5 ft.) tall. Plants emerge from thick, minimally branched roots or semi-woody crowns. Individuals remain as a rosette for several weeks before the stem elongates. Rosette and basal leaves tend to senesce as the top of the plants develops. The above ground parts begin to die back in late summer or early fall. Dead stems can persist for several years. *Lepidium latifolium* flowers in early summer, continuing through most of the growing season; fruits are produced in the late summer and fall. Plants have a horseradish taste and odor.

Stems and foliage are glaucous (waxy grayish-green) and tend to be glabrous, although they can sometimes be hairy. Rosette leaves are up to approximately 30 cm (11.8 in.) long and 8 cm (3 in.) wide with serrate margins and 3-15 cm (1.2-6 in.) long petioles. The cauline leaves are alternate, sessile and significantly reduced. They taper at the base, are lanceolate to elliptic or oblong and have entire or weakly serrate margins.

The flowers of *Lepidium latifolium* are densely clustered in terminal panicles. There are 4 small, green, oval sepals; 4 white, ovate petals approximately 1.5 mm (0.06 in.) long; 6 stamens and a single pistil which gives rise to a small (2 mm (0.08 in.)) round capsule (silicle), with a single slightly flattened reddish-brown seed in each chamber. Seedlings are not usually observed in the wild.

Page References Fernald 702, Gleason & Cronquist 181, Holmgren 165, Magee & Ahles 553. See reference section below for full citations.

SIMILAR SPECIES

None.

REPRODUCTIVE/DISPERSAL MECHANISMS

The seeds of *Lepidium latifolium* are mechanically dispersed, but few seedlings have been observed in the field. Local spread is achieved vegetatively through rhizomes.

DISTRIBUTION

Lepidium latifolium is native to southeast Europe, North Africa and southwest Asia. It is reported as a non-native in northern Europe and has invaded Australia. It is known to occur in three Canadian provinces. In the United States, infestations have been reported in all states west of the Rocky Mountains. In New England it occurs in Massachusetts, Connecticut and New Hampshire. It is considered Restricted and Invasive in Connecticut.

HISTORY OF INTRODUCTION IN NEW ENGLAND

Lepidium latifolium was first reported as an escapee in New England from Peabody, Massachusetts (Essex County) in 1924 near the American Glue Company. There is speculation that its introduction at this site may have been through glue-stock. In Connecticut, it was first reported in 1933 from near the site of a dye and licorice works in Noroton (Fairfield County) where it "spread greatly on the shore in the past year" and "in one summer has already covered a large marshy field and is spreading all over the place." A population along the Massachusetts Turnpike in Auburn (Worcester County) was first observed in 1997. Its occurrence in New Hampshire was published in 2006.

HABITATS IN NEW ENGLAND

Abandoned Field
Agricultural Field
Coastal Beach or Dune
Coastal Grassland
Herbaceous Wetland
Pasture
Roadside
Salt Marsh
Vacant Lot
Wet Meadow
Yard or Garden

In New England, infestations of *Lepidium latifolium* are mainly found near the coast and on coastal islands. It often occurs at the upper edges of salt marshes above the high tide line, frequently forming dense stands. It also occurs well removed from the coast (for example along the Massachusetts Turnpike in Worcester County, MA), where it grows in disturbed areas near roads.

THREATS

Lepidium latifolium has the ability to form dense stands of plants that can increase in size over time. It grows at the upper edge of salt marshes and can be dispersed by animals, humans or vehicles that pass through these stands. Its seeds have been shown to remain viable even after being in salt water, implying that they can also disperse by tidal currents. *Lepidium latifolium* appears to out-compete other species that naturally occur in these habitats. Its establishment along highways suggests that it may disperse away from the coast and into minimally managed habitats and disturbed areas elsewhere in the region.

EARLY WARNING NOTES

The distribution of *Lepidium latifolium* is still restricted in New England, and new populations should be anticipated in coastal areas. It may also spread to additional non-coastal areas, from which it should also be reported immediately.

MANAGEMENT LINKS

The Nature Conservancy

Plant Conservation Alliance
Fact sheet including management information

The California Exotic Pest Plant Council
Summary of biology and control

The California Invasive Plant Council

DOCUMENTATION NEEDS

Documentation needs:A photograph showing the plant and its overall habit, so that the size of the plant can be determined.

ADDITIONAL INFORMATION

Integrated Taxonomic Information System (ITIS)
General taxonomic information

The PLANTS Database
Distribution and taxonomic information, additional links

The Nature Conservancy
Extensive information on biology and control

Montana State University
General and control information

The California Exotic Pest Plant Council
Summary of biology and control

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DATA RETRIEVAL

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

- (•) Formatted display as table
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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