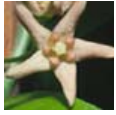




## Invasive Plant Atlas of New England

### 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

Brassicaceae

#### 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."

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- 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
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- One or more counties
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