

Perennial pepperweed

Lepidium latifolium

Fact Sheet

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Common Name: Perennial pepperweed
New Hampshire Invasive Species Status: Prohibited (Agr 3800)

Latin Name: *Lepidium latifolium*
Native to: Eurasia



Basal rosette (spring)



Perennial pepperweed -
Portsmouth, NH



Leaves (spring/summer)



Flowers (spring)



Pods called siliques (late summer)



Seeds



Escaped onto compost pile



Persistent Stems (Autumn)



Rhizomatous root

Description: Perennial, 3-8' tall. **Leaves:** Alternate, lanceolate with serrated edge, 6" long by 2" wide. **Flowers:** Terminal, clustered, white, July. **Fruit:** Silicle, rounded, flattish, hairy 1/16" long. **Zone:** 4-8. **Habitat:** Wet, brackish soils such as coastal tidal marshes, wetlands, and floodplains. **Spread:** Seeds and creeping rhizome fragments spread by water, wildlife and humans. **Comments:** Plants spread quickly into natural areas leading to competition and displacement of native coastal wetland species. **Controls:** Small populations can be hand pulled, large populations can be continuously cut to prevent flowering and seed production. Herbicide treatments are also effective.

General Considerations

Perennial pepperweed is a highly invasive perennial forb occurring mostly in wetland and estuarine habitats. It is a tall, multi-stemmed perennial that can grow to 3-8' (1-2.5 m). Seeds germinate early in the spring and form the first-year's set of basal rosettes with 4 to 12" (10-30 cm) long by 1 to 3" (2.5-8 cm) wide strap type leaves. Below ground is an extensive rooting system that extends horizontally as well as penetrating to depths of 2' (61 cm). Shoot nodes often form along the horizontal roots to create new plants. As the plant ages it creates an erect stem with the lower leaves having petioles

Perennial pepperweed is an Early Detection Rapid Response (EDRR) Species and should be controlled once detected.

while the upper leaves form close to the stem (sessile). Leaf size decreases up the stem.

In New Hampshire, Perennial pepperweed is not yet widespread and is only found in a few areas in the seacoast and one site in Franconia Notch. With its populations limited it is considered an Early Detection Rapid Response (EDRR) species, meaning that once found it is advisable to eradicate it before it goes to seed. The average rate of spread for established populations along the perimeter is usually between 3-6' (1-2 m) per year. In addition, root fragments less than ¾" (0.8 cm) in diameter and less than 1" (2.5 cm) long can form new plants often generating more than 1 shoot.

Control Options

See the following control guides: [Control of Invasive Species by Numbers](#)

<i>Lepidium latifolium</i> Perennial pepperweed	
Plant Type	Perennial
Habitat Type	Coastal habitats, marshes, roads
USDA Hardiness Zone	4-8
Rooting Structure	Creeping, w/taproot
Environmental Impacts	Displaces native vegetation
Wildlife Impacts	Reduces forage quality in hay or pasture
Leaf arrangement	Alternate
NWI Ranking	FACU
Soil Type	Sandy, cobble or loamy soils
Soil pH Range	7.5 to 9.2
Light Requirements	Prefers full sun, but grows in light shade.
Growing Season	
Growth Rate	
Mature Height	1-6' (30-182 cm)
Life Span	?
Reproductive Age	1 year
Flowering Period	Mid June
Flower Type	Monoecious
Pollination	Open-pollinated - insects
Seed Set	July - August
Seed Per Plant	Thousands per year
Scarification Required	Yes
Cold Stratification	Yes
Seed Longevity	2 years
Seed Germination Rate	64-100%
Seedling Density	?
Other Propagules	Root fragments
Dispersal Vectors	Small mammals, water

Sources

Mehrhoff, L., 2001. Invasive Plant Atlas of New England, Catalog of Species, *Alliaria petiolata*: http://www.eddmaps.org/ipane/ipanespecies/herbs/Lepidium_latifolium.htm

USDA Forest Service invasive species website: <http://www.fs.fed.us/database/feis/plants/forb/leplat/al1.html>

Invasives.org: <http://www.invasive.org/browse/subinfo.cfm?sub=5931>