

-State Species Abstract-
-Wyoming Natural Diversity Database-

LEPIDIUM INTEGRIFOLIUM VAR.
INTEGRIFOLIUM
ENTIRE-LEAVED PEPPERGRASS
Family: Brassicaceae

Status:

US Fish & Wildlife Service: None.
Agency Status: WY BLM: Sensitive.

Heritage Rank:

Global: G1G2T1? State: S1
WYNDD Plant List: Regional Endemic
(Very High Wyoming Contribution Rank)

Description: Entire-leaved peppergrass is a perennial forb with erect to prostrate, minutely-pubescent stems 15-25 cm tall from a thick, branched caudex covered with remnant leaf bases. Basal leaves are 3-8.5 cm long x 6-25 mm wide and have elliptic to oblanceolate blades with entire margins and sparse pubescence (especially on the veins and margins). Stem leaves are 1-4 cm long, gradually reduced in size, and glabrate. Flowers have 4 pubescent sepals and 4 white petals less than 3 mm long. Fruits are glabrous, flat, ovate to lance-ovate silicles 3-4.2 mm long with styles 0.4-0.7 mm long (Rollins 1993; Welsh et al. 1993).

Synonyms: *Lepidium montanum* var. *integrifolium*.

Identification Comments: Combinations of entire leaves, thick taproot, and fruits over 3 mm long are unique among Wyoming species of *Lepidium*.

Similar Species: *Lepidium barnebyanum* has linear leaves and petals over 3 mm long and is a narrow endemic of white shales in Duchesne County, Utah. *L. latifolium* has entire to serrate leaves, fruits 1.5-2 mm long,



Above, below: *Lepidium integrifolium* var. *integrifolium*, by Bonnie Heidel



Above: *Lepidium integrifolium* var. *integrifolium* by Walter Fertig.

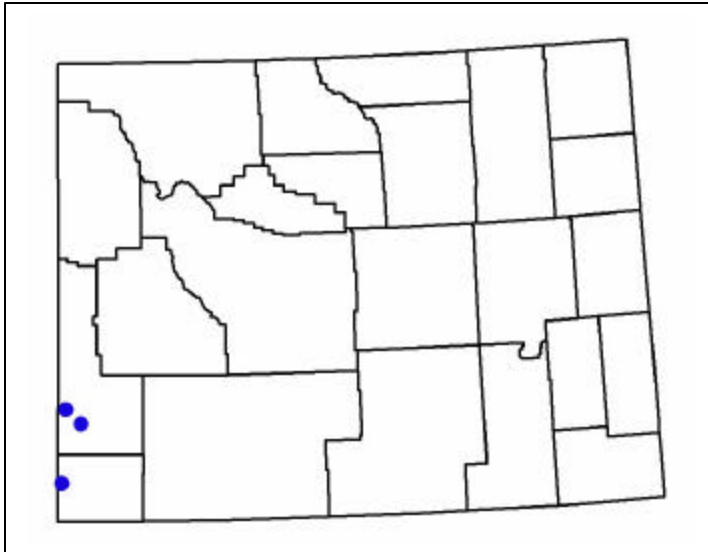
and typically is over 80 cm tall. *L. montanum* var. *alyssoides* has narrowly linear, mostly entire leaves (some have a few lobes at the base) and is typically over 60 cm tall.

Flowering/Fruiting Period: Flowers from mid-June-early July, and fruits are present from late June-August.

Distribution: Regional endemic of northeastern Utah and southwestern Wyoming, plus historic records in south-central Utah. In Wyoming, known only from the southern Overthrust Belt in Lincoln and Uinta counties, in the Bear River watershed.



Above, below: *Lepidium integrifolium* var. *integrifolium* habitat, by Bonnie Heidel



Wyoming distribution of *Lepidium integrifolium* var. *integrifolium*.



Occurrences in Wyoming: Known from three extant occurrences in the state, the most recent observed in 2003.

Abundance: Estimated between 21,000-155,000 plants statewide. Rare to locally common in suitable habitat.

Habitat: Wet meadows associated with low-elevation riparian habitat of foothills and valleybottoms, at margins where salts accumulate. Wyoming populations occur in sparsely vegetated and seasonally wet silt flats, sometimes with a claypan, dominated by *Distichilis stricta* and *Carex praegracilis*, sometimes with *Sarcobatus vermiculatus*, at 6170-6790 feet.

Trends: Loss is inferred at the Fossil Butte Station and was likely elsewhere in Wyoming with valleybottom agricultural developments. Stone (1998) suggested that populations from south-central Utah may be extirpated.

Protection status: Part of one occurrence is protected in Fossil Butte National Monument, extending onto BLM lands managed for multiple-use. A second occurrence is protected in Cokeville National Wildlife

Refuge extending onto state land management for multiple-use.

Threats: The habitat has been impacted by channelization, ditching, impoundments, plowing to establish tamegrass hayland, road construction, and railroad construction. It is potentially impacted by herbicides. Many populations in Utah are thought to be extirpated.

Managed Areas: Occurs in Fossil Butte National Monument, the BLM Kemmerer Field Office, and Cokeville National Wildlife Refuge, and state lands.

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Date: 00-09-29

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Update: 04-03-14