

-State Species Abstract-
-[Wyoming Natural Diversity Database](#)-

MUSINEON VAGINATUM
SHEATHED MUSINEON
Family: Apiaceae

Agency Status

US Fish & Wildlife Service: None.
US Forest Service: SOLC-Bighorn NF

Heritage Rank

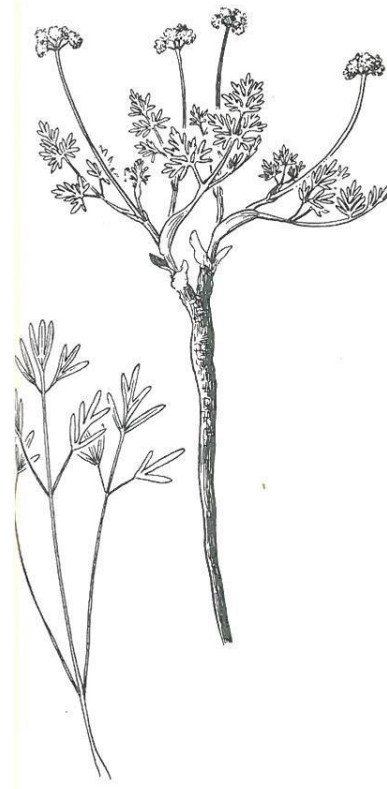
Global: G3G4
State: S2
Range Context: Regional Endemic/Edge
Wyoming Contribution Rank: Medium

Description: Sheathed musineon is a multi-branched perennial herb with a stout taproot. The leafy stems are 15-30 cm tall at maturity and often purplish at the base of the stem and the leaf sheaths. Leaves are alternate and ternately divided into narrow, linear entire segments, with the lower pair of pinnae on slender stalks. The inflorescence is a compact umbel 1-1.5 cm wide borne on a stem that equals the leaves during flowering, but which becomes elongated in fruit. Flowers have 5 yellow or white petals and lack a stylopodium. Fruits are ovate, unflattened, 3-4 mm long schizocarps with glabrous to slightly roughened small ribs (Dorn 2001; Hitchcock et al. 1961).

Similar Species: *Musineon divaricatum* has essentially opposite leaves with deeply lobed and toothed pinnae. *M. tenuifolium* lacks stem leaves. *Cymopterus* and *Lomatium* species have flattened fruits with or without prominent wings (Dorn 2001). It strongly resembles *L. cous* in flower, distinguished by the broad leaf sheath and linear leaflets (Heidel 2011).

Phenology: Flowers from June- early July, fruits from July-August.

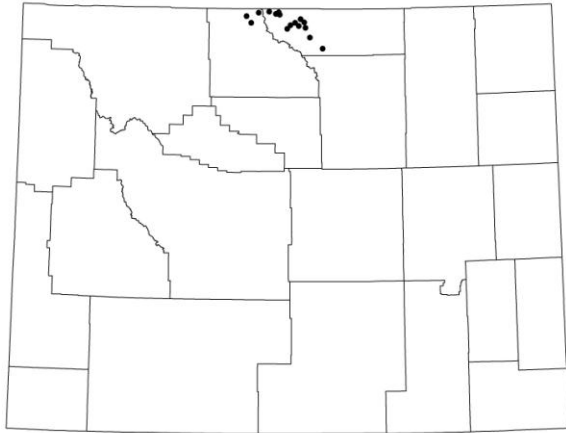
Distribution: Regional endemic of western and south-central Montana and north-central Wyoming. Reports from northern Utah (Mathias and Constance 1944) are thought to be based on misidentified specimens. In Wyoming, this species is restricted to the north end of Bighorn Mountains in Big Horn and Sheridan counties.



Above: *Musineon vaginatum* by Jeanne R. Janish. Reprinted with permission from: Hitchcock, C.L. and A. Cronquist. 1961. Pt.3. Saxifragaceae to Ericaceae. In: C.L Hitchcock, A. Cronquist, M. Ownbey, and J.W. Thomas. Vascular Plants of the Pacific Northwest. University of Washington Publication in Biology 17(12): 1-597.



Above: *Musineon vaginatum* by B. Heidel



Above: Wyoming distribution of *Musineon vaginatum*

Habitat: Sheathed musineon occurs in a variety of settings that include conifer woodlands and forests, openings, rocky slopes, meadows, and aspen groves. Soils are derived from limestone or Chugwater redbed shale. Elevation 4200-9680 ft.



Above: *Musineon vaginatum* habitat by Bonnie Heidel

Occurrences in Wyoming: Known from 16 occurrences in Wyoming.

Abundance: Estimated 15,000-50,000 plants.

Trends: Probably stable, persisting under open conditions or closed canopies, and after fire (Heidel 2011).

Protection Status: Three populations are found in the Amsden Creek Big Game Range, Little Mountain ACEC, and a TNC conservation easement in the Columbus Creek area. Populations are also known from the Montana portion of Bighorn Canyon National Recreation Area (Lichvar et al. 1984, 1985; Heidel and Fertig 2000). All other known populations are on public lands managed for multiple use.

Threats: Threats are generally low. Logging practices are potential threats if they cause mechanical damage to the surface or if revegetation increases competition.

Managed Areas: Occurs in Bighorn National Forest and the BLM Cody Field Office.

References

Dorn, R.D. 2001. Vascular Plants of Wyoming, 3rd ed. Mountain West Publishing, Cheyenne, WY. 412 pp.

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