

-State Species Abstract-
-Wyoming Natural Diversity Database-

ELEOCHARIS TENUIS VAR. *BOREALIS*
BOREAL SPIKERUSH
Family: Cyperaceae

Status:

US Fish & Wildlife Service: None.
Agency Status: USFS R2 sensitive

Heritage Rank:

Global: G5T5 State: S1
Range Context: Widespread/ edge
Wyoming Contribution Rank: Low

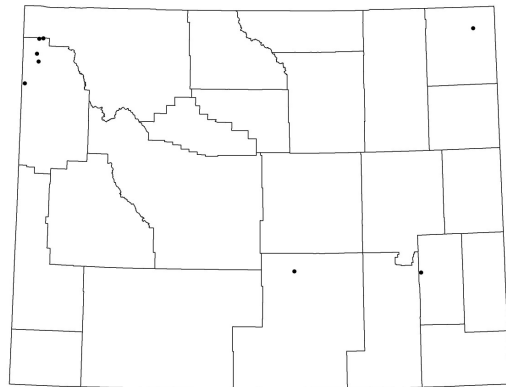
Description: Boreal spikerush is a perennial graminoid with slender culms 5-40 cm tall that are loosely clustered along a creeping rhizome. Leaves consist of only a basal sheath that is reddish-purple towards the base. The inflorescence is a single, terminal, elliptical spikelet 3-10 mm long that contains 10-30 flowers. Flowering scales are oval and dark purplish-black. Achenes are unequally 3-sided, yellow to dull-orange, and conspicuously roughened on the surface, but not ribbed. The tubercle at the tip of the achene is set off from the main body by a low collar or rim. Flowers have 3 styles and poorly developed or no bristles (Hitchcock et al. 1969; Gleason and Cronquist 1991; Dorn 2001).

Synonym: *Eleocharis elliptica*.

Similar Species: *Eleocharis palustris* has 2-sided (lens-shaped) achenes and 2 stigmas (rarely 3). *E. acicularis* and *E. bella* have ashy-white to gray achenes with numerous horizontal and vertical ribs. *E. quinqueflora* and *E. rostellata* have tubercles on the tip of the achenes that are not set off from the main body by a groove or indentation (Dorn 2001; Hitchcock et al. 1969).



Eleocharis tenuis var. *borealis*. by Bonnie Heidel



Above: Wyoming distribution of *Eleocharis tenuis* var. *borealis*.

Flowering/Fruiting Period: June-August.

Distribution: Var. *borealis* ranges from Newfoundland to British Columbia and south to Montana, Wyoming, Missouri, and Pennsylvania. In Wyoming it is known from the Laramie Range, Great Divide Basin, and Yellowstone Plateau in Platte, Carbon, and Teton counties. A report from the Bear Lodge Mountains in Crook County needs to be confirmed.

Habitat: In Yellowstone National Park this species is often associated with thermally influenced seeps, and springs, although populations may also occur in non-thermal seepage areas at 6200-7600 feet.



Eleocharis tenuis var. *borealis* habitat, by Bonnie Heidel

Occurrences in Wyoming: Known from at least 7 extant records in Wyoming, all observed since 1993 (most recently in 2007).

Abundance: There are estimates of 100-200 stems at one site in Yellowstone NP, and estimates of over 1000 stems at an occurrence in the Great Divide Basin. Estimates are unavailable for other populations.

Trends: Not known.

Protection status: At least 5 occurrences are protected in Yellowstone National Park. Other known occurrences in the state or on public lands managed for multiple use.

Threats: May be impacted by degradation of wetland habitats by road building.

Managed Areas: Occurs on lands managed by Yellowstone National Park, BLM Rawlins Field Office, and Medicine Bow National Forest.

References:

Dorn, R.D. 2001. Vascular Plants of Wyoming, third edition. Mountain West Publishing, Cheyenne, WY.

Flora of North America Editorial Committee. 2002. Flora of North America north of

Mexico. Vol. 23. Magnoliophyta: Commelinidae (in part): Cyperaceae. Oxford Univ. Press, New York. xxiv + 608 pp.

Gleason, H.A. and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Canada. New York Botanical Garden, Bronx, NY.

Hitchcock, C.L., A. Cronquist, and M. Ownbey. 1969. Pt. 1. Vascular Cryptograms, Gymnosperms, and Monocotyledons, IN: Hitchcock, C.L., A. Cronquist, M. Ownbey, and J.W. Thompson (eds). Vascular Plants of the Pacific Northwest. University of Washington Publications in Biology 17(1): 1-914.

Markow, S. and W. Fertig. 1993. Report on a general floristic survey of vascular plants of Targhee National Forest and vicinity. Unpublished report prepared for Targhee National Forest by the Rocky Mountain Herbarium and the Wyoming Natural Diversity Database, Laramie, WY.

Moseley, R.K., R. Bursik, and M. Mancuso. 1991. Floristic inventory of wetlands in Fremont and Teton Counties, Idaho. Unpublished report prepared for Targhee National Forest by the Conservation Data Center, Idaho Department of Fish and Game, Boise, ID. November 1991.

Nellessen, J.E. (2006, August 10). *Eleocharis elliptica* Kunth (elliptic spikerush): A Technical Conservation Assessment. [Online]. USDA Forest Service, Rocky Mountain Region. Available: <http://www.fs.fed.us/r2/projects/scp/assessments/aleteshumilis.pdf> [2008].

Author: Walter Fertig

Updated: Joy Handley 08-01-25