

-State Species Abstract-
-Wyoming Natural Diversity Database-

EQUISETUM FLUVIATILE
WATER HORSETAIL
Family: Equisetaceae

Status:

US Fish & Wildlife Service: None.

Agency Status: None.

Heritage Rank:

Global: G5 State: S1

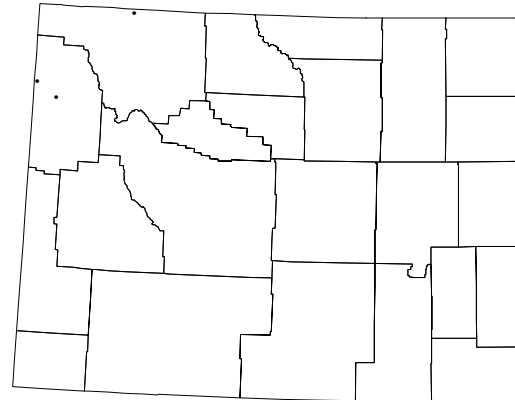
WYNDD Plant List: Disjunct (Medium conservation priority)

Description: Water horsetail has sterile and fertile stems that are similar in size and appearance, both growing up to 1 meter tall from long-creeping, reddish rootstalks. Stems are annual, greenish, 2.5-9 mm in diameter, and have 9-24 shallow longitudinal ridges. The central cavity of stem joints are over 4/5 the diameter of the stem. Sheaths are green, 4-9 mm long, and tipped with persistent, sharp, separate black teeth. Stem branches, if present, are whorled and simple. Cones (strobili) are 12-20 mm long, rounded at tip, and borne on short stalks (Cobb 1956; Hitchcock et al. 1969; Lellinger 1985; Dorn 1992).

Similar Species: *Equisetum arvense* has dimorphic stems, with the green sterile stems having numerous whorled branches and central cavities less than 1/2 the diameter of the main stem and the fertile stems being unbranched and pale yellowish-brown. *E. laevigatum* has unbranched stems, sheaths with deciduous black teeth, and cones with sharp-pointed tips. *E. hyemale* has unbranched perennial stems and sheaths with a pair of black bands. *E. sylvaticum* has twice-branched stem branches and sheath teeth united into 2-5 reddish-brown clusters (Hitchcock et al. 1969; Dorn 1992).

Flowering/Fruiting Period: Spores produced June-late August.

Distribution: Ranges from Labrador to Alaska south to Virginia, Illinois, NW Wyoming, N Idaho, and Washington. In Wyoming, known only from the Yellowstone Plateau, Jackson Hole, and the Beartooth Mountains in Park and Teton counties.



Above: Wyoming distribution of *E. fluviatile*.

Habitat: Muddy shores of swamps and in shallow water of small ponds at 6400-8150 feet. The Beartooth Mountain population is found on moist, clay-rich, deep soils in a dried pond dominated by *Carex rostrata*.

Occurrences in Wyoming: Known from 2 extant occurrences in Wyoming, most recently observed in 1996. One historical record (1899) from Jackson Lake may be extirpated.

Abundance: Found to be locally abundant at one recently discovered site in Park County, but restricted to less than 5 acres of habitat. Yellowstone National Park population is also small (ca 100 stems) according to Dorn.

Trends: Not known.

Protection Status: Two populations are found in Yellowstone and Grand Teton National Parks and the third is within the Absaroka-Beartooth Wilderness Area on Shoshone National Forest. The latter population may be within the potential Lake Creek Bogs RNA.

Threats: One population is thought to be extirpated due to dam construction on Jackson Lake.

Managed Areas: Known Wyoming populations are found in Yellowstone and Grand Teton National Parks and Shoshone National Forest.

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