

-State Species Abstract-
-Wyoming Natural Diversity Database-

CAREX NELSONII
NELSON'S SEDGE
Family: Cyperaceae

Status:

US Fish & Wildlife Service: None.

Agency Status: None.

Heritage Rank:

Global: G3G4 State: S2

WYNDD Plant List: Regional endemic
(Medium conservation priority)

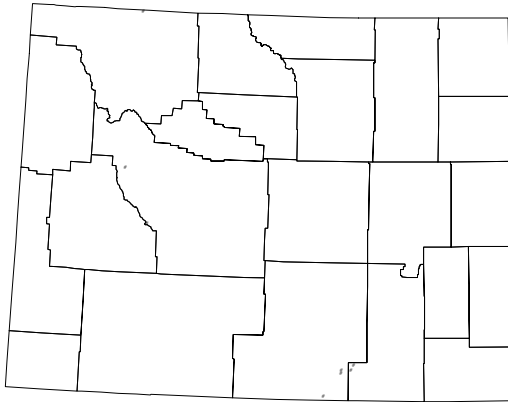
Description: Nelson's sedge is a tufted perennial graminoid with short rhizomes and erect culms 10-30 cm tall. Leaves are clustered near the base and are much shorter than the culms. Leaf blades are flat, 1-3 mm wide, and under 12 cm long. The head-like inflorescence is 10-12 mm long and consists of 2-4 brown to reddish-black, closely aggregated sessile spikes above a sheathless, scale-like or inconspicuous bract. The terminal spike contains both pistillate and staminate flowers, with the pistillate borne at the tip. Pistillate scales are ovate to lance-ovate, black to black-purplish, and mostly without a midrib or pale, membranous margin. The yellow-green to reddish-black, nerveless, slender perigynia are 3-3.8 mm long, 1-1.8 mm wide, and gradually taper to a beak over 0.6 mm long. The margins of the perigynia are bumpy or minutely saw-toothed. Perigynia at the base of the flowering head are typically erect to spreading at maturity. Achenes are 3-sided and pistillate flowers have 3 stigmas (Dorn 1992; Hurd et al. 1998; Hermann 1970; Welsh et al. 1993).



Above: *Carex nelsonii* from Hermann (1970).

Similar Species: *Carex nova* has broader perigynia (mostly over 2 mm wide), shorter beaks (under 0.7 mm), and basal perigynia that droop at maturity. *C. albonigra* and *C. atrata* have less congested heads with lateral spikes on obvious stalks (Murray 1969; Dorn 1992).

Flowering/Fruiting Period: July-early September.



Above: Wyoming distribution of *Carex nelsonii*.

Distribution: Regional endemic of the mountains of western Montana, western and southeastern Wyoming, northeast Utah, and central Colorado (Murray 1969; Dorn 1984). In Wyoming, Nelson's sedge is known from the Medicine Bow, Sierra Madre, Beartooth, and Wind River ranges in Albany, Carbon, Fremont, and Park counties.

Habitat: Montane to alpine moist sedge meadows, lakeshores and rocky slopes, usually on granitic-derived soils. Elevation 9500-11,200 feet.

Occurrences in Wyoming: Known from 7 extant and 1 historical occurrences in Wyoming, only two of which have been observed since 1984 (most recently in 1999).

Abundance: Reported as "infrequent" at several sites on the Beartooth Plateau by Sabine Mellmann-Brown in 1998.

Trends: Trend data are lacking for known occurrences, but populations are assumed to be stable.

Protection status: Two occurrences are known from the Fitzpatrick and Popo Agie Wilderness Areas. One of these same populations is in the potential Arrow Mountain Research Natural Area, and one other occurrence is in the proposed Line Creek/Twin Lakes RNA. All other known occurrences are found on public lands managed for multiple use.

Threats: May be threatened by sheep grazing or impacts from recreational activities.

Managed Areas: Known occurrences are from Medicine Bow and Shoshone National Forests.

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