

-State Species Abstract-
-Wyoming Natural Diversity Database-

CAREX INCURVIFORMIS
VAR. *DANAENSIS*
SEASIDE SEDGE
Family: Cyperaceae

Status:

US Fish & Wildlife Service: None.

Agency Status: USFS Region 4 Sensitive.

Heritage Rank:

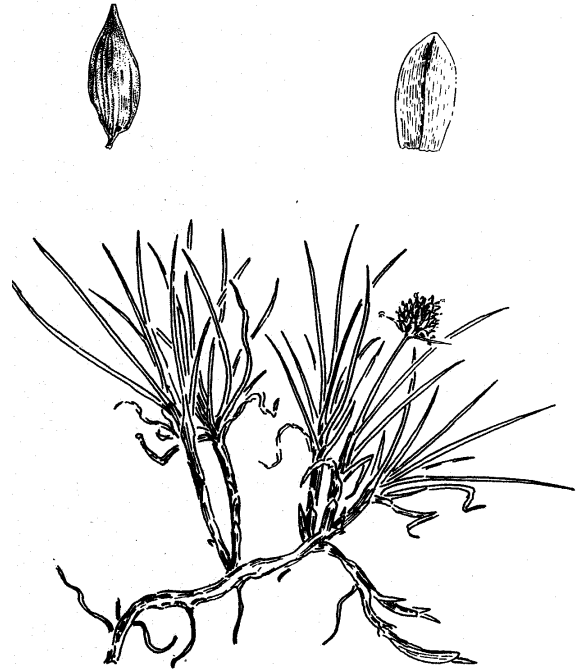
Global: G4G5T3 State: S2

WYNDD Plant List: Sparse (Medium conservation priority)

Description: Incurved sedge is a loosely-tufted perennial graminoid with creeping rhizomes and culms 2-4 cm high. Leaves are mostly basal and exceed the culms and flowering heads in height. Leaf blades are less than 1.5 mm wide, thick, and flat (but become inrolled at the very tip). The inflorescence is a globe or egg-shaped head 8-14 mm wide and composed of two or more densely aggregated spikes. Staminate flowers are inconspicuous and located above the pistillate flowers (androgynous). Pistillate flowers have round-tipped, brown scales with wide, membranous margins. The perigynia are dark, glossy, brown, about 3.25 mm long, and have a gradually tapering beak with two stigmas. The achenes are two-sided (lens-shaped) and 1.5 mm long (Dorn 1992; Fertig 1999; Fertig et al. 1994; Hermann 1970; Mills and Fertig 1996; Scott 1997).

Synonyms: *Carex incurviformis*, *C. maritima*.

Similar Species: *Carex foetida* var. *vernacula* has leaves that are shorter than the flowering spikes and over 1.5 mm wide. *C. capitata* has a single spike per stem. Other alpine *Carex* spp. in Wyoming with



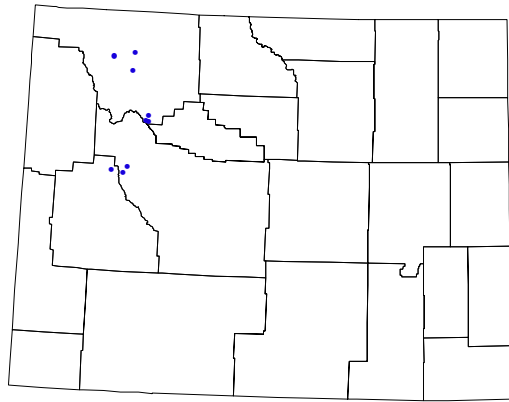
Above: *Carex incurviformis* var. *danaensis* from Hermann (1970).

congested, ball-like inflorescences have 3 stigmas and 3-sided achenes, or deciduous pistillate scales, or lack rhizomes (Dorn 1992; Fertig et al. 1994).

Flowering/Fruiting Period: July-August.

Distribution: *Carex incurviformis* (sensu stricto) occurs sporadically from central Alberta to northwestern Montana, east-central Idaho, and northwestern Wyoming, with disjunct populations in central California and central Colorado (Fertig 1999). In Wyoming, it is known only from the Absaroka and Wind River ranges in Fremont, Park, and Sublette counties.

Habitat: Alpine and subalpine bogs, wet tundra, cliffs, talus and, and dry meadows at 10000-12,240 feet. Associated with



Wyoming distribution of *Carex incurviformis* var. *danaensis*.

Deschampsia cespitosa, *Juncus castaneus*,
Carex bipartita, *Sedum rhodanthum* and
Polygonum viviparum.

Occurrences in Wyoming: Known from 10 records in Wyoming, all of which have been observed or discovered since 1981.

Abundance: Population sizes are not known for most occurrences.

Trends: Presumed to be stable, although hard census and trend data are lacking for all known occurrences.

Protection status: At least 7 occurrences are protected in the Bridger, Fitzpatrick, North Absaroka, and Washakie Wilderness Areas and Osborn Mountain Research Natural Area. One of these populations is also found in the potential Arrow Mountain RNA. All other populations are on public lands managed for multiple use.

Threats: Threats are probably low due to the plant's remote and rugged alpine habitat.

Managed Areas: Known occurrences are found in Bridger-Teton and Shoshone National Forests.

Notes: The taxonomy of this species is complex. If recognized as a distinct species (*C. incurviformis*), Wyoming material is considered var. *danaensis*, recognized by its more broadly rounded pistillate scales with wider membranous margins than typical var. *incurviformis* material from the Canadian Rockies. If *C. incurviformis* is considered a Rocky Mountain morph of the circumpolar littoral species *C. maritima*, our material becomes var. *incurviformis*. Many recent treatments consider var. *danaensis* to be a minor variant within *incurviformis*, although Dorn (1992) and Mastroguiseppe (1993) continue to recognize it as a distinct entity.

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Author: Walter Fertig

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