

**Added to Rank 2.2 of the CNPS Inventory on November 21, 2011****Rare Plant Status Review: *Carex stevenii*  
Proposed New Add to Rank ~~2.1~~ 2.2, G4? / S1**

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Changes made to the original document appear in blue text.

**Background**

*Carex stevenii* is a perennial herb in the Cyperaceae family that is primarily found in the Rocky Mountains, ranging from Saskatchewan south to New Mexico, and disjunctly in the White Mountains of eastern California. It is included in *Flora of North America*, Vol. 23 (available online at [http://www.efloras.org/florataxon.aspx?flora\\_id=1&taxon\\_id=242357554](http://www.efloras.org/florataxon.aspx?flora_id=1&taxon_id=242357554)) and *The Jepson Manual, Second Edition* (available online at [http://ucjeps.berkeley.edu/tjm2/review/treatments/cyperaceae\\_all.html#17671](http://ucjeps.berkeley.edu/tjm2/review/treatments/cyperaceae_all.html#17671)). The two California populations were previously thought to be *Carex norvegica*, which was included in *The Jepson Manual* (1993) and the CNPS Inventory under Rank 2.3. *Carex norvegica* was deleted from the CNPS Inventory in 2008, due to uncertainty on the identification of the California populations. After extensive review of herbarium specimens, the vouchers for the two California populations have been identified to *Carex stevenii* by Peter Zika. A similar species, tentatively placed in *Carex albonigra* but possibly an undescribed California endemic, also occurs in similar habitats in the White Mountains (P. Zika pers. comm. 2011). All three of these species – *C. albonigra*, *C. norvegica*, and *C. stevenii* are morphologically similar and closely related (*TJM 2*, *FNA*). *Carex stevenii* can be distinguished from *Carex albonigra* by its green to olive perigynia perianth that is strongly contrasting with, and not hidden by, the shorter, darker, pistillate flower bracts (*TJM 2*). It can be distinguished from *Carex norvegica* by its smooth to sparsely papillose perigynia (compared to the strongly papillose perigynia of *C. norvegica*), its less compact inflorescence, and beaks that are longer and less abruptly formed (Murray 1969). An earlier description of *C. stevenii* confined its extent to subalpine regions, while *C. norvegica* was supposed to occupy the alpine tundra zone (Murray 1969), but the more recent *FNA* treatment acknowledges the presence of alpine populations of *C. stevenii* in Colorado. *Carex stevenii* has been observed flowering in California in August (Consortium of California Herbaria 2011).

*Carex stevenii* grows in the alpine boulder and rock field zone in California's White Mountains, occurring both along creeks and in the drier portion of meadows. The populations are found at roughly 2850 and 3385 meters.

Only two occurrences of *Carex stevenii* are known from California, on lands managed by the Inyo National Forest in the White Mountains. These populations are disjunct from the nearest known populations in southwestern Utah (Murray 1969). Although both of these populations have not been documented in the field since the late 1980s,

due to their habitat and location it is likely that they are still extant. Their current status should be determined through field surveys.

Outside of California, *C. stevenii* is Critically Imperiled (S1; 5 or fewer occurrences) in Montana and Vulnerable (S3; 80 or fewer occurrences) in Wyoming (NatureServe 2011). It also occurs at other high elevation sites in Colorado, Idaho, Utah, New Mexico, and Saskatchewan, Canada, but has no ranking in any of those states or provinces (FNA, NatureServe 2011).

Threats to the persistence of this species in California are not known, but it should be considered of conservation concern due to the extremely limited number of occurrences in the state.

Based on the available information, CNPS and CNDDDB recommend that *Carex stevenii* be added to California Rare Plant Rank ~~2-1~~ [2.2](#).

### **Recommended Actions**

CNPS: Add to CNPS ~~2-1~~ [2.2](#)

CNDDDB: Add to CNDDDB G4? / S1

### **Draft CNPS Inventory Record**

*Carex stevenii* (T. Holm) Kalela

Steven's sedge

Rank ~~2-1~~ [2.2](#)

[Mono](#) ~~hyo~~

Colorado, Idaho, Montana, New Mexico, Utah, Wyoming

Boundary Peak (450D) 3711873, White Mtn Peak (432A) 3711863

Alpine boulder and rock fields / sometimes along creeks, sometimes dry meadows; elevation 2850-3385 meters.

Perennial rhizomatous herb. Blooms August.

Known in CA only from the White Mtns., where previously thought to be *C. norvegica*.

All occurrences historical; need field surveys. See *American Journal of Science* (ser. 4) 16:21-27 (1903) for original description.