***Calliergonella cuspidata* (Hedwig) Loeske – calliergonella moss**

**Family: Amblystegiaceae**

Account written by Derek Antonelli, 12/26/2020

Rank of S1S2 Recommended by

North Idaho Rare Plant Working Group on 1/18/2022

**Current Conservation Status:**

\*NatureServe3: G5, NNR, Idaho SNR Other states: British Columbia S4S5, Washington SNR,

 Oregon SNR, Montana SNR, Wyoming SNR

2009 INPS rank²: Not listed

BLM:

FS Reg 1: Not listed

FS Reg 4: Not listed

FS Reg 6: Not listed

FWS: Not listed

**Taxonomy:** Published in *Hedwigia* 50: 248. 1911.

*Synonyms:* *Hypnum cuspidatum*, *Calliergon cuspidatum*

*Other Subspecies/Varieties, if applicable:*

*Type Locality:*

*\*Taxonomic key(s)7:* Common Mosses of Western Oregon and Washington; Flora of North America, Vol 28

**Species Description (OPTIONAL):** **Plants**to 7 cm, in loose tufts or mats. **Stems** erect, semierect, or decumbent, terete-foliate, pinnate when erect, irregularly branched when decumbent, flattened in cross section, usually turgid at stem and branch apices; outer cortical cells in 3 or 4 layers, inner cortical cells large, walls thin; pseudoparaphyllia foliose; axillary hair basal cell 1, short, brown. **Stem** leaves ovate, short, broad; apex acute and weakly cuspidate to rounded; costa double, short, usually inconspicuous, or ecostate; supra-alar cells often ± quadrate, walls thicker than those of alar cells; inner basal laminal cells short-elongate, walls thick, pitted; apical cells short, weakly sinuate. **Branch** leaves lanceolate, longer; apex usually cuspidate; ecostate or costa double, short; alar region ± auriculate. **Perigonia** axillary, budlike, apex flaring. **Perichaetia** axillary, inner leaves long-lanceolate, plicate, margins weakly serrate basally, apex flaring at archegonial maturity, ecostate. **Seta** long, ± erect. **Capsule** with exothecial cells collenchymatous; annulus differentiated, 2–4-seriate; operculum conic-apiculate; exostome teeth with external surface striolate basally, papillose distally; endostome basal membrane high, segments keeled, perforate. **Spores** finely punctate. From FNA.

**Biology:** Life span (perennial), growth form (moss)

**Similar species:**

**Habitat:** Elevation from low to high; Calcareous wetlands, moderately rich fens, among sedges, lake margins, roadside ditches, weed in lawns

*\*֎Environmental Specificity10:*

**Cultural and commercial values:**

**Landownership:**  Federal (agency/district), tribal (nation), state, private, other

**Distribution:**

*Global Range*: Worldwide



*\*Range Extent Descriptor6:* Sparse

֎*Rank Calculator Idaho Range Extent:* 5,500 sq km **(E)**.

֎*Area of Occupancy:* Four 4-km2 grid cells **(C).**

*\*Idaho Counties9:* Bonner, Boundary, Elmore, Idaho

*Idaho Specimens:* Put this on a separate spreadsheet if there are numerous specimens

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Record source (Herbarium, IFWIS, person)** | **Date observed/ collected** | **Observer** | **County** | **Location** | **Abundance, threats, habitat condition** |
| Leiberg 302 | 1891-04-00 | John Leiberg | Bonner | Mouth of Cedar Creek at Lake Pend Oreille | Historic |
| MacFadden 18693 | 1941-07-05 | Fay MacFadden | Elmore | Atlanta Hot springs |  |
| Steele M242 | 1975-08-22 | Robert W. Steele | Idaho | Dixie Road above Deer Creek |  |
| Bursik 2469 | 1992-08-26 | Rob Bursik | Bonner | Gamble Lake |  |
| Gray 1300 | 1996-09-03 | Gray and Hill | Boundary Creek | Perkins Lake |  |

*Literature Records:*

*Databases/Herbaria consulted (and query date):* Consortium of Pacific Northwest Herbaria, Consortium of North American Bryophyte Herbaria

*Research Notes:*

**Abundance:**

*\*֎Number of Occurrences8:* There are 4 population locations plus 1 historic (1891) location. **(A)**

*֎Population Size:* Unknown **(U)**

*֎Number of Occurrences with Good Viability:* Viability of the populations has not been evaluated, so between 0 and 4 with good viability. **(AC).**

**Conservation concerns:**

*֎Threats (include scope, severity and timing, if known):* Unknown; threats have not been assessed. Unknown **(U)**

*\*֎Overall Threat Rank11:* Unknown **(U)**

*֎Intrinsic Vulnerability:* (Optional; Used only if Threats unknown. A= highly, B=moderately, C=not intrinsically vulnerable.)

**Population trend:**

*֎Short:*

*֎Long:*

**Proposed rank information:**

*\*Date Ranked5:* Met the North Idaho Rare Plant Working Group on 1/18/2022.

*\*Proposed Rank:* S1S2

*\*Proposed INPS Status2:* Rare

*\*Comments12:*

**\*Recommended actions13:**

**Information Sources:**

Consortium of Pacific Northwest Herbaria. (<http://www.pnwherbaria.org>, December 2020).

Consortium of North American Byrophyte Herbaria. (<https://bryophyteportal.org/portal>, December 2020).

Flora of North America, Volume 28.

McClune, B. and M. Hutten. 2018. *Common Mosses of Western Oregon and Washington*. 148pp.

NatureServe Explorer. (<http://explorer.natureserve.org>, December 2020)

Schofield, W. B. 1992. *Some Common Mosses of British Columbia*. 394pp.