**\***֎***Eleocharis mamillata* (H. Lindberg) H. Lindberg ssp. *mamillata***

 **Soft-stem spikerush**

**Cyperaceae – sedge family**

Account written by Derek Antonelli and Harpoo Faust on 2/10/2021 ֎\*

North Idaho Rare Plant Working Group recommended rank of S1 on 2/10/2021

**Current Conservation Status:**

\*NatureServe3: G5, not listed for Idaho, British Columbia S5, Washington SNR

2009 INPS rank²:

BLM: Not listed

FS Reg 1: Not listed

FS Reg 4: Not listed

FS Reg 6: Not listed

FWS: Not listed

**Taxonomy:**

*Synonyms:*

*Subspecies:* Flora of North America and Flora of the Pacific Northwest recognize the subspecies *mamillata* but NatureServe and USDA Plant do not. Only subspecies *mamillata* is found in North America. Subspecies *austriaca* is found in Europe.

*Type Locality:*

*\*Taxonomic key(s)7:* Flora of North America and Flora of the Pacific Northwest

**Species Description (OPTIONAL):** **Plants**perennial, mat-forming; rhizomes evident, long, 0.7–1 mm thick, soft, cortex persistent, longer internodes 2–6 cm, scales often fugaceous, 5–9 mm, membranous, not fibrous. **Culms** terete, often with 8–14 blunt ridges when dry, 10–50 cm × 0.5–3 mm, very soft, internally spongy. **Leaves**: distal leaf sheaths persistent, often splitting abaxially, mostly reddish proximally, green to stramineous distally, not inflated, not callose, membranous, apex obtuse, tooth absent. **Spikelets** ovoid, 5–20 × 3–5 mm, acute; proximal scale clasping 2/3 of culm, entire; subproximal scale empty; floral scales often spreading in fruit, 15–80, 5 per mm of rachilla, medium brown, midrib regions stramineous or greenish, ovate, 2.5–4 × 1.5–2 mm, entire, apex acute to obtuse, sometimes carinate in distal part of spikelet. **Flowers**: perianth bristles (4–)5–6(–8), brown, slender to stout, mostly exceeding tubercle, to 2 times longer than achene; stamens 3; anthers stramineous, 0.9–1.5 mm; styles 2-fid. **Achenes** not persistent, yellow maturing to stramineous, biconvex, angles obscure, obovoid (to obpyriform), 1–1.4 × 0.9–1.3 mm, apex rounded, neck absent, smooth at 30X. **Tubercles** brown to partly whitish, pyramidal to mamillate, lower than to as high as wide, 0.2–0.6 × 0.4–0.6 mm. **2n** = 16.

**Biology:** Life span (perennial), growth form (graminoid);

**Similar species:** *E. marcostachya* and *E. palustris*

**Habitat:** Fresh lakeshores, shallow ponds, streams, floating mats, bogs, fens, ditches. Elevation: 20–800 m

*\*֎Environmental Specificity10:*

**Cultural and commercial values:**

**Landownership:**  State or private

**Distribution:**

*Global Range*:

*\*Range Extent Descriptor6:* Peripheral

֎*Rank Calculator Idaho Range Extent:* Only known from one Idaho location. Less than 1 sq km **(A).**

֎*Area of Occupancy:* Only known from one Idaho location. One 4-km2 grid square **(A)**.

*\*Idaho Counties9:* Bonner

*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** |
| CPNWH ID | 9/4/1988 | Bursik 1588 | Bonner | Chase Lake |  |

*Literature Records:*

*Databases/Herbaria consulted (and query date):* CPNWH

*Research Notes:*

**Abundance:**

*\*֎Number of Occurrences8:* Only known from one Idaho location. One occurrence **(A).**

*֎Population Size:* Unknown **(U)**

*֎Number of Occurrences with Good Viability:* Population viability not accessed so zero or one **(AB).**

**Conservation concerns:**

*֎Threats (include scope, severity and timing, if known):* Unknown

*\*֎Overall Threat Rank11*: Unknown

*֎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:* North Idaho Rare Plant Working Group recommended S1 rank on 2/10/2021

*\*Proposed Rank:* S1

*\*Proposed INPS Status2*: Rare

*\*Comments12:*

**\*Recommended actions13:**

**Information Sources:**

Consortium of Pacific Northwest Herbaria. (<http://www.pnwherbaria.org>, February 2021).

Biota of North America Program, North American Vascular Flora (<http://bonap.net/NAPA/Genus/Traditional/County>, February 2021)

Flora of North America, Volume 23.

Hitchcock, C.L. and A. Cronquist. 2018. *Flora of the Pacific Northwest: An Illustrated Manual, 2nd Edition*. Edited by D.E. Giblin, B.S. Legler, P.F. Zika, and R.G. Olmstead. University of Washington Press, Seattle, WA. 936pp.

NatureServe Explorer. (<http://explorer.natureserve.org>, February 2021)