***Phacelia scopulina* (A. Nels.) J.T. Howell var *scopulina*–** **Prostrate Scorpionweed**

**Hydrophyllaceae – Waterleaf family**

Account written by Carol A. M. Prentice, Oct. 11, 2021& Feb 2022

Recommended Rank S1 assigned by Rare Plant Working Group on Oct 13, 2021

**Current Conservation Status:**

\*NatureServe3: G4TNR, Idaho SNR, Colorado: SNR, Montana: SNR, Nevada: SNR, Oregon: SNR, Utah: SNR, Wyoming: S2 BONAP G4/T4

2009 INPS rank²: Not listed

BLM: none

FS Reg 1: none

FS Reg 4: none

FS Reg 6: none

FWS: none

**Taxonomy:**

First collection

Marcus E. Jones s.n. Utah, Tooele, Dutch Mt. 1891-06-12

First Publication of Species and synonyms

*Emmenanthe foliosa* M. E. Jones, Zoe 4:278. 1893*. Miltitzia foliosa* A. Brand. Pflanzenr*.*IV. Fam. 251:131. 1913; nor Philippi, 1891. (Jones s.n., Deep Creek Valley above Fuber. Tooele Co. Utah, 8 June 1891; holotype at POM!)=Phacelia lutea var. scopulina.

*Emmenanthe scopulina* A. Nels. Bull. Torrey Bot. Club 25:380. 1898*.* (Lectotype: A. Nelson 3056, Green River, Sweetwater County, Wyoming. 31 May 1897. RM! Isolectotypes: US! NY! MO! GH! Syntype: A. Nelson 3026, Green River, Sweetwater County, Wyoming. 30 May 1897. RM! US!)

*Miltitzia lutea* var. *scopulina* A. Brand. Pflanzenr IV. Fam. 251:131. 1913.  *Miltiizia scopulina* Rydb. Bull. Torrey, Bot. Club 40:479. 1913*. P. scopulina* J. T. Howell, Leafl. W. Bot. 4:16. 1944*.*

*P. lutea* var*. scopulina* Cronq. Univ. Wash. Publ. Biol. 17(4):168. 1959. (Nelson 3056, Green River, Sweetwater Co., Wyo., 31 May 1897; lectotype by Howell, at RM!

Timeline

Description automatically generated

National Herbarium Isolectotype A.Nelson 3056 Green River May 31, 1897

Text, timeline

Description automatically generated

Isosyntype (dup of syntype…part of original description w/out holotype)

*Other Subspecies/Varieties, if applicable:* None other in Idaho.

Phacelia scopulina var. sulomutica Colorado**:**S2 Local endemic on clay knolls in Mesa County, Colorado, near DeBeque, and disjunct along the Little Colorado River near Winslow, Arizona (Fig. 9). May to June

*\*Taxonomic key(s)7:* Intermountain Flora V.4 p. 176.

Text

Description automatically generated with medium confidence**Species Description (OPTIONAL):** Somewhat mephitic, taprooted annual, freely branched from base.

**Biology:** Life span - annual, growth form - forb; reproduces by seed; flowers in Idaho May to July.

Fruiting calyx 5-7 ram long; style 1-2 mm long, pubescent half to all of its length; capsule apiculate; n=12.

Alkaline flats and slopes from southwestern Wyoming to central

Nevada, north to southeastern Oregon and adjacent Idaho, disjunct in southwest Montana (Fig. 9). May to July.

Representative specimens: IDAHO. Owyhee Co.: 5 miles S of

Grasmere, Baker 14057 (ID); 2 miles E of Reynolds School, Bratz

B117B -78 (CIC).

**Similar species:**  P. lutea var. l., P. lutea var. calva, P. salina, P. scopulina var. submutica, P. monoensis

**Habitat:** Elevation 3000 to 5000 feet occupies a great range of edaphic situations, having been collected on alkaline flats, sagebrush flats, gravelly and sandy soils, sterile flats, clay soil, volcanic tuff, and loamy soil. It usually grows in a sagebrush-juniper community associated with such herbs as Lupinus, Phlox, and Bromus tectorum.

*\*֎Environmental Specificity10:* narrow, white ash

**Cultural and commercial values:** none known

**Landownership:**  Federal BLM

**Distribution:**

*Global Range*: Idaho, Colorado, Montana, Nevada, Oregon, Utah, Wyoming

*\*Range Extent Descriptor6:* Peripheral

֎*Rank Calculator Idaho Range Extent:* Include mapped/estimated actual square km or miles, and the calculator category (A-H, Z, or U). Google Earth polygon 4135 sq miles

Category E

֎*Area of Occupancy:* Actual number of grid cells and calculator category. 4 grid cells Category C

*\*Idaho Counties9:* Owyhee, Cassia, Twin Falls

*Idaho Specimens:* see below



Locations highlighted in yellow are duplicates.

*Literature Records:*

Cronquist, A. J., A. H. Holmgren, N. H. Holmgren, J. L. Reveal & P. K. Holmgren. 1984. Vascular Plants of the Intermountain West, U.S.A. 4: 1–573. In A. J. Cronquist, A. H. Holmgren, N. H. Holmgren, J. L. Reveal & P. K. Holmgren (eds.) [Intermont. Fl.](https://www.tropicos.org/Publication/3267). Hafner Pub. Co., New York.

Halse, Richard R. “TAXONOMY OF PHACELIA SECT. MILTITZIA (HYDROPHYLLACEAE).” Madroño, vol. 28, no. 3, 1981, pp. 121–132.

*Databases/Herbaria consulted (and query date):* CPNW Oct. 2021; SEInet Oct 2021; Intermountain Regional Herbaria Network Oct. 2021, CIC Oct. 2021,

**Abundance:**

*\*֎Number of Occurrences8:* 4 = A

*֎Population Size:* unknown

*֎Number of Occurrences with Good Viability:* unknown, but unlikely to viable at all four locations given the age of the records and general conditions of habitat. 0-3= AB

**Conservation concerns:**

*֎Threats (include scope, severity and timing, if known):* Mining, vehicles (old roadbed), livestock trampling, invasive grasses.

*\*֎Overall Threat Rank11:* High

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

**Population trend:**

*֎Short:* unknown

*֎Long:* unknown

**Proposed rank information:**

*\*Date Ranked5:* Preliminary 10/12/2021; by SIRPWG 2/14/2022

*\*Proposed Rank:* Calculated and recommended S1

*\*Proposed INPS Status2:* Add as Rare

*\*Comments12:* BLM add as Special Status

**\*Recommended actions13:** BLM add as Special Status. Document populations at known sites, locate new populations by searching preferred habitat.