Phacelia tetramera J.T. Howell

dwarf phacelia

Hydrophyllaceae - waterleaf family status: State Sensitive, BLM sensitive

rank: G4 / S1

General Description: A dapted from Cronquist et al. (1972-94): Tiny, hairy, slender annual, freely branching from the base; lies flat on the ground, mat-forming. Leaves with petioles, usually sub-opposite, oblanceolate, margins entire or with a few coarse teeth or shallow lobes. Blades up to $1.5\ \text{cm} \times 7\ \text{mm}$. Stem leaves gradually become smaller and nearly sessile upward.

Floral Characteristics: Numerous small inflorescences are located in the forks of the branches, or at the very ends of the branches. Small, inconspicuous flowers are 4-parted or occasionally 5-parted, borne either on short stalks, or virtually stalkless. Corolla white or pale yellow, persistent, surrounding the fruit, about 1-1.5 mm long, and up to 2 mm long in fruit. Calyx nearly or fully twice as long as the corolla.

Fruits: About 20 ovules; seeds 6-10, about 0.7-1 mm long, dark brown to black; the surface pitted-netted and wrinkled in approximately parallel horizontal rings. Flowering begins in April. Plants are extremely small, not readily visible, and fully senescent by June.

Identification Tips: This taxon is unique among *Phacelia* species within its range in WA, distinguished by its annual habit, entire to shallowly-lobed leaves, (usually) 4-parted flowers, and small corollas, which are not more than 2 mm long. It can be easily distinguished from its close relative, *P. sericea*, which grows erect, reaching heights of 10-40 cm tall, and has pinnatifid leaves.

Range: WA, south to CA and east to NV, UT, and WY.

Habitat/Ecology: Alkaline soils, vernal pools, swales and wetlands, in sagebrush steppe communities from 350-700 m (1200-2200 ft) elevation. It grows in salt-encrusted soil, alkaline clay and fine silt, and cracked bare alkaline silt in vernally moist wetlands. Associated species include big sagebrush (Artemisia tridentata), stiff sagebrush (Artemisia rigida), greasewood (Sarcobatus vermiculatus), Sandberg's bluegrass (Poa secunda), saltgrass (Distichlis spicata), soft brome (Bromus hordeaceus ssp. hordeaceus), cheatgrass (Bromus tectorum), basin wild rye (Leymus cinereus), and clasping pepperweed (Lepidium perfoliatum).

Comments: This species is also rare in UT and WY.

References: Cronquist et al. 1972-94, vol. 4.





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