

-State Species Abstract-
-Wyoming Natural Diversity Database-

PHACELIA TETRAMERA
TINY PHACELIA
Family: Hydrophyllaceae

Status:

US Fish & Wildlife Service: None.
Agency Status: None.

Heritage Rank:

Global: G4 State: S1
Range Context: Peripheral (widespread/edge)
Wyoming Contribution Rank: Low

Description: Tiny phacelia is a slender annual, branched at the base, prostrate, and often mat-forming. Leaves are entire or nearly so, up to 2 cm long and less than 1 cm wide, lanceolate or lance-ovate, with short, spreading hairs throughout. The inconspicuous white or pale yellow flowers are 1-2 mm long, usually 4-lobed, sessile or on short pedicels, persisting in fruit. The calyx is nearly or fully twice as long as the flowering tube. There are 6+ ovules per ovary. The seeds are 6-10 X 0.7-1 mm and pitted, with a series of ridges across the width (Cronquist et al. 1984, Dorn 2001, Heidel 2008).

Similar Species: *Phacelia demissa*, *P. incana* and *P. linearis* have corollas 3-13 mm long, usually 5-lobed. *P. salina* has coarsely-toothed leaves, and flowers with 5 petals that are 2-4 mm long. *P. scopulina* has 5 petals that are more than 2 mm long.

Flowering/Fruiting Period: Flowering in late May-June; fruiting in late June-early July.

Distribution: Ranging from eastern Oregon to California and east to Utah and Wyoming. Wyoming populations are known from the Great Divide and Washakie Basins

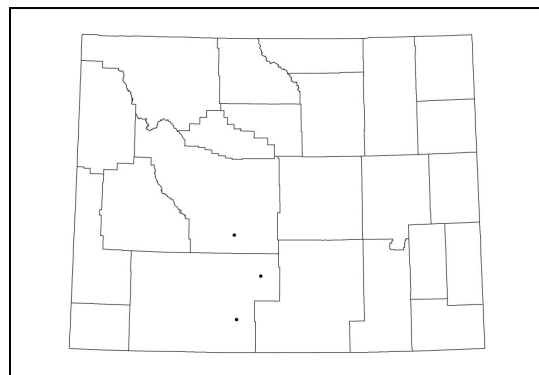
(Sweetwater County) and the Sweetwater River Valley (Fremont County).



Above: *Phacelia tetramera*. By B. Heidel.

Habitat: Reported from saline *Salicornia-Suaeda* communities in Utah (Welsh et al. 1993). In Wyoming, found on stabilized sand dunes (beneath *Artemisia tridentata*), sandy alluvial terraces above rivers surrounded by *Artemisia tridentata-Chrysothamnus nauseosus-Sarcobatus* vegetation, and on mounds within playa vegetation with *Sarcobatus vermiculatus*, *Chrysothamnus viscidiflorus*, *Atriplex gardneri*, *Lepidium montanum*, *Cryptantha circumscissa*, and *Camissonia minor* (elevation 6500-7200 feet).

Associated Rare Species: *Monolepis pusilla*



Wyoming distribution of *Phacelia tetramera*

Occurrences in Wyoming: Known from 3 extant occurrences in Wyoming, most recently observed in 2007.

Abundance: Approximately 100 individuals observed in small colony in 1994, and 200-400 plants estimated in widely-scattered colonies in 2007. This species may be more abundant and widespread than currently known due to its tiny stature.

Trends: Not known.

Protection status: One occurrence is protected on TNC's Sweetwater Preserve and another in the Chain Lakes Wildlife Habitat Management Area. The other occurrence is on public lands managed for multiple use.

Threats: May be impacted by ORV activity, roads, noxious weed invasion, mineral and energy developments.

Managed Areas: Found on lands managed by the BLM Rawlins and Rock Springs Field Offices, Wyoming Game and Fish Department, and TNC's Sweetwater Preserve.

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