



GET TO KNOW THE PLATEAU

Cinder Phacelia *Phacelia serrata*

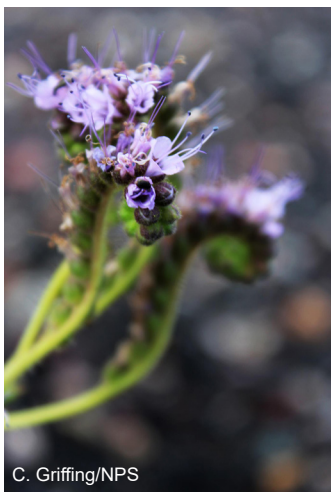
Habitat & Ecology

Choosing a very specific substrate and location to survive, cinder phacelia thrives in exposed sunny locations where the soil consists of deep volcanic cinders. Habitat can also include ponderosa pines and pinyon-juniper and tends to be at elevations ranging from 5,200 to 8,000 feet. There are only two known areas where cinder phacelia grows, the San Francisco Volcanic Field in northern Arizona, including Sunset Crater National Monument, and Zuni Bandera Volcanic Field in New Mexico, including El Malpais National Monument. Roughly 200 miles exists between these two locales, and more surveys should take place to determine if this plant might be in other locations.

Description

Phacelia serrata is in the Boraginaceae family, and the subfamily of Waterleaf or Hydrophyllaceae. It is an annual, growing about 4"-14" tall. The leaves are a serrate lanceolate shape with a basal base. A distinguishing feature are the multicellular glandular hairs that can get quite sticky on the stems. Attractive petite blueish to light violet flowers in a bell like formation develop in coils similar to the tail of a scorpion, hence the common name for many *Phacelia* plants, scorpionweed. The corolla itself has five petals. Cinder phacelia blooms between July-October.

Conservation Status and Threats



C. Griffing/NPS

According to the New Mexico Rare Plant Technical Council's Rare Plant Scorecard, *Phacelia serrata* is "Under Conserved". Natural Heritage New Mexico lists it as an 'S2' species, meaning it is imperiled. The US Fish and Wildlife Service and the Arizona Game and Fish Department classify it as a Species of Concern. The Bureau of Land Management has placed it under its Watch status.

Rare and Endemic Plant



Known threats to this species are cinder quarrying, but populations have been shown to recover once quarries are abandoned.

Related Species

A relative and look-alike, *Phacelia integrifolia*, grows throughout the region, often in cinder substrate as well. This species also has a different bloom cycle that can begin as early as April.

Of Note

As botany is always full of imagination and purpose, *Phacelia*'s genus produces nectar at the base of the flower's corolla, where the nectar is protected by tiny flaps. The pollinator has to struggle past these flaps to make its way to the desired food source, causing pollen to cover its whole body, which it then transfers to the next plant it travels to.

References

- Springer, Judith, Mark L. Daniels, and Marie Nazaire. 2009. Field Guide to Forest and Mountain Plants of Northern Arizona, page 386.
- Carter, Jack, Martha Carter, and Donna J. Stevens. 2009. Common Southwestern Native Plants, pg 227.