

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PDPLMODOGO

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Phlox cluteana*

**COMMON NAME:** Navajo Mountain phlox, Navajo phlox

**SYNONYMS:**

**FAMILY:** Polemoniaceae

**AUTHOR, PLACE OF PUBLICATION:** A. Nelson, The American Botanist Volume 28: 24. 1922.

**TYPE LOCALITY:** U.S.A. Utah, San Juan County, Navajo Mountain, near summit.

**TYPE SPECIMEN:** HT: BRY-168073. Clute 18, July 1919.

**TAXONOMIC UNIQUENESS:** A distinct species in a genus of 50 species in America. USDA, NRCS (2004) reports 70 species occurring in the genus *Phlox* in North America.

**DESCRIPTION:** Herbaceous colonial perennial with slender, creeping rhizomes; stems mostly 8-10 cm (3-4 in) long, sparsely to densely glandular pubescent. Slabý (1990-2004) reports plant size of 15-25 cm (6-10 in). Leaves are evergreen, 1-4 cm long, entire, linear to narrowly lanceolate or elliptic, glabrous to ciliate or sometimes pubescent like the stems. The inflorescence is of short, terminal cymes; pedicels 3-15 mm long. Flowers are large and showy, light pink to purple. The calyx is 6-8 mm long; corolla tube 8-18 mm long, the lobes are rounded at the apex, 8-10 mm long and nearly as wide; stamens included or slightly exserted.

**AIDS TO IDENTIFICATION:** *Phlox amabilis* and *Phlox longifolia* have taproots and usually deciduous leaves, whereas *Phlox cluteana* has a slender rhizomatous rootstock and evergreen leaves. Its simple cyme, flat leaves, and slender stems distinguish it from other *Phlox*.

**ILLUSTRATIONS:** Color photo (Roth *in*

[http://nmrareplants.unm.edu/photoimages/images/phlclu\\_det.jpg](http://nmrareplants.unm.edu/photoimages/images/phlclu_det.jpg)).

Line Drawing (Welsh, 1979).

Line Drawing (M.S. *in* <http://nmrareplants.unm.edu/drawings/phlclu.htm>)

Color photo of plant and habitat (Roth, 2001)

Color photo (D. Roth *in* Utah Native Plant Society, Inc. 2003-4)

**TOTAL RANGE:** Mountains along the northeastern Arizona-southeastern Utah border and adjacent, extreme northwestern, New Mexico. Also reported from North-central Arizona.

**RANGE WITHIN ARIZONA:** Northern Chuska Mountains, Navajo Mountain, and Black Rock Mountains. Apache, Coconino, and Navajo counties.

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Perennial forb/herb.

**PHENOLOGY:** Flowers June to July.

**BIOLOGY:** This plant can be propagated by several mechanisms: by seed when ripe in early spring; by division in early spring and fall; or by cuttings in late summer (Slabý 1990-2004).

**HABITAT:** Open ponderosa pine forests on flat to gentle mountain slopes, with light to heavy shade. On Granitic hills in Yavapai County, Arizona (SEINet, accessed 2004).

**ELEVATION:** 6,003 - 10,397 ft (1,831-3,171 m). 7,868-10,820 ft (2400-3300 m) reported by Slabý (1990-2004). Collected at 5,250 and 6,550 feet (1601 & 1998 m) in Yavapai County (SEINet, accessed 2004).

**EXPOSURE:** All aspects.

**SUBSTRATE:** Navajo Sandstone Formation, with sandy and dry gravelly soil.

**PLANT COMMUNITY:** Open ponderosa pine forests. Associated species include: *Pinus ponderosa* (Ponderosa pine), *Populus tremuloides* (quaking aspen), *Pseudotsuga menziesii* (Douglas-fir), *Quercus turbinella* (Shrub live oak). Associated species in Yavapai County include: *Antennaria parvifolia* (Nuttall's pussytoes), *Asclepias asperula* (Spider milkweed), *Astragalus tephrodes* (Ashen milkvetch), *Calliandra humilis* (Dwarf stickpea), *Calochortus ambiguus* (Doubting Mariposa-lily), *Eriogonum wrightii* (Wright's wild buckwheat), *Forestiera pubescens* (Dwarf swamppivet), *Juniperus deppeana* (Alligator juniper), *Quercus turbinella* (Shrub live oak), and *Rhus trilobata* (sumac). (SEINet, accessed 2004).

**POPULATION HISTORY AND TRENDS:** This species can be locally abundant within its limited range. According to Art Phillips (1991), he "remembers it is fairly common and witnessed a flock of sheep that came through a population under study and the sheep did not touch the plants. Seems fairly common and habitat is common."

**SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None  
**STATE STATUS:** None  
**OTHER STATUS:** None

**MANAGEMENT FACTORS:** The effects of logging and forest fire on this species have not been evaluated. Trail or roadside management could remove portions of the populations. Grazing of sheep and horses did not appear to negatively affect the populations.

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** In 1979, Welsh (being aware of only the Navajo Mountain population) suggested that the total population should be ascertained by intensive survey. He proposed that a monitoring program be established and a portion of the area be set-aside as a natural area.

**LAND MANAGEMENT/OWNERSHIP:** BIA - Navajo Nation; BLM - Arizona Strip Field Office.

**SOURCES OF FURTHER INFORMATION****REFERENCES:**

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**ADDITIONAL INFORMATION:**

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