

Phacelia parishii A. Gray**PARISH PHACELIA**

FAMILY: *Hydrophyllaceae*, the waterleaf family.

STATUS:

Heritage Program SENSITIVE LIST, ranks: G2G3 S2S3

USFWS/ESA: species of concern. **STATE OF NEVADA:** none. **BLM:** Special Status Species in Nevada.

USFS: none. **NNNPS:** watch list.

POPULATION CENSUS (NEVADA): 16 occurrences mapped; total estimated individuals 37,000,000+, total estimated area 1860+ ha (4596+ ac). **TREND:** DECLINING.

IMPACTS AND MAJOR THREATS (NEVADA): No summary available (see references).

INVENTORY EFFORT (NEVADA): Surveys in Nevada are largely complete. Most recent entered survey 1998, average year of last survey 1989. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 5.9%; **6-10 yrs:** 88.2%; **51+ yrs or unknown:** 5.9%.

LAND MANAGEMENT (NEVADA) in decreasing predominance: U. S. Bureau of Land Management, private lands, U. S. Fish and Wildlife Service, U. S. Department of Defense, Nevada state lands.

RANGE: Clark, Lincoln, Nye, and White Pine counties, Nevada; also in AZ and CA. Maximum Nevada **range dimension** 378.7 km (235.3 mi) excluding most disjunct record.

ELEVATIONS RECORDED (NEVADA): 2190-5922 feet (668-1805 meters).

HABITAT (NEVADA): Moist to superficially dry, open, flat to hummocky, mostly barren, often salt-crusts silty-clay soils on valley bottom flats, lake deposits, and playa edges, often near seepage areas, sometimes on gypsum deposits, surrounded by saltbush scrub vegetation but with few immediate associates such as *Atriplex confertifolia*, *A. canescens*, *A. argentea*, *Poa secunda*, *Monolepis nuttalliana*, *Phacelia fremontii*, *Lepidium flavum*, *Sarcobatus vermiculatus*, etc. Aquatic or wetland-dependent in Nevada.

PHENOLOGY: flowering late-spring. Range of most frequent **survey months:** April-August.

LIFE-FORM AND HABIT: small annual.

DESCRIPTION: not available (see references).

PHOTOGRAPHS: Blomquist et al. (1995), Knight and Smith (1996), Knight et al. (1997), Smith (1997); Nevada Natural Heritage Program files.

ILLUSTRATIONS: Cronquist et al. (1984).

OTHER GENERAL REFERENCES (listed separately): Beatley (1976), Cochrane (1979), Hickman (1993), Niles et al. (1998).

SPECIFIC REFERENCES:

Harrison, B. F. 1980. Botanical survey of threatened and endangered plants Schell Resource Area. Ely, Nevada: Bureau of Land Management.

Howell, J. T. 1943. Studies in *Phacelia* - A revision of species related to *P. pulchella* and *P. rotundifolia*. *American Midland Naturalist* 29: 1-26.

Smith, F. 1997. Current knowledge and conservation status of *Phacelia parishii* A. Gray (*Hydrophyllaceae*) in Nevada, September 1996 (second draft 1/17/97). Carson City: Nevada Natural Heritage Program, DRAFT status report prepared for the U. S. Fish and Wildlife Service, Reno.

Cryptantha welshii Thorne & Higgins (1982)**WHITE RIVER CATSEYE**

FAMILY: *Boraginaceae*, the forget-me-not family.

STATUS:

Heritage Program SENSITIVE LIST, ranks: G3 S3

USFWS/ESA: species of concern. STATE OF NEVADA: none. BLM: Special Status Species. USFS: none.

NNPS: watch list.

POPULATION CENSUS: 35 occurrences mapped at 1.0 km (0.6 mi) separation, OR 40 occurrences mapped at 0.16 km (0.1 mi) separation; total estimated individuals 44,000+, total estimated area 354+ ha (875+ ac). TREND: unknown.

IMPACTS AND MAJOR THREATS: The species appears to tolerate or even increase with transient disturbances within its habitat, such as animal trampling and roadside maintenance. Other than occasional habitat loss from road building or other conversion, no impacts are known.

INVENTORY EFFORT: Systematic surveys have been conducted, but much potential habitat likely remains to be examined. Most recent entered survey 1994, average year of last survey 1993.

Years since last entered survey (percent of mapped records at various survey ages): 6-10 yrs: 90%; 11-20 yrs: 2.5%; 21-30 yrs: 7.5%.

LAND MANAGEMENT in decreasing predominance: U. S. Bureau of Land Management, Nevada state lands, private lands.

RANGE: Lincoln, Nye, and White Pine counties, Nevada. Nevada endemic. Maximum range dimension 142.2 km (88.4 mi) excluding most disjunct record. Type specimen collected in Nye County.

ELEVATIONS RECORDED: 4540-6660 feet (1384-2030 meters).

HABITAT: Dry, open, sparsely vegetated outcrops, and derived sandy to silty or clay soils, of whitish calcareous or carbonate deposits, often forming knolls or gravelly hills, and on soils adjacent to such habitats, mostly in Juniperus - Artemisia - Chrysothamnus vegetation with Artemisia pygmaea, Stenotus acaulis, Eriogonum shockleyi, Hymenopappus filifolius, Physaria, Erigeron compactus, Enceliopsis nudicaulis, Lepidium nanum, L. montanum, Linum perenne, Stanleya pinnata, Hilaria jamesii, Astragalus calycosus, Leucelene ericoides, Phlox tumulosa, Frasera albomarginata, etc.

PHENOLOGY: flowering late-spring. Range of most frequent survey months: May-June.

LIFE-FORM AND HABIT: biennial or short-lived perennial herb.

DESCRIPTION: A biennial or short-lived perennial, up to 3 dm tall, with several hairy stems. Produces white flowers in early summer.

PHOTOGRAPHS: Smith (1994); Nevada Natural Heritage Program slide collection (1986-present).

ILLUSTRATIONS: Cronquist et al. (1984), Thorne and Higgins (1982).

SPECIFIC REFERENCES:

Smith, F. J. 1994. Status report for *Cryptantha welshii* Thorne and Higgins (1982). Carson City: Nevada Natural Heritage Program, prepared for the U. S. Fish and Wildlife Service, Reno.

Thorne, K. H. and L. C. Higgins. 1982. A new species of *Cryptantha* (Boraginaceae) from Nevada. Great Basin Naturalist 42: 196-198.

Asclepias eastwoodiana Barneby (1945)EASTWOOD MILKWEED

FAMILY: *Asclepiadaceae*, the milkweed family.

SYNONYMS: *Asclepias uncialis* ssp. *ruthiae* (?)

STATUS:

Heritage Program SENSITIVE LIST, ranks: G2Q S2

USFWS/ESA: species of concern. **STATE OF NEVADA:** none. **BLM:** Special Status Species. **USFS:** Humboldt-Toiyabe NF Sensitive Species. **NNNPS:** watch list.

POPULATION CENSUS: 19 occurrences mapped at 1.0 km (0.6 mi) separation, OR 28 occurrences mapped at 0.16 km (0.1 mi) separation; total estimated individuals 1475+, total estimated area unknown. **TREND:** unknown.

IMPACTS AND MAJOR THREATS: USFS: Trampling by cattle and habitat loss due to mining and road construction are major threats.

INVENTORY EFFORT: Not yet systematically surveyed in Nevada. Most recent entered survey 1991, average year of last survey 1976. **Years since last entered survey** (percent of mapped records at various survey ages): **6-10 yrs:** 3.6%; **11-20 yrs:** 39.3%; **21-30 yrs:** 46.4%; **51+ yrs or unknown:** 10.7%.

LAND MANAGEMENT in decreasing predominance: U. S. Bureau of Land Management, Humboldt-Toiyabe National Forest, U. S. Department of Defense, Nevada state lands, private lands (?), designated wilderness (?).

RANGE: Esmeralda, Lander, Lincoln, and Nye counties, Nevada. Nevada endemic. Maximum range dimension 283.8 km (176.3 mi) excluding most disjunct record. **Type specimen** collected in Lander County.

ELEVATIONS RECORDED: 4680-7080 feet (1426-2158 meters).

HABITAT: In open areas on a wide variety of basic (pH usually 8 or higher) soils, including calcareous clay knolls, sand, carbonate or basaltic gravels, or shale outcrops, generally barren and lacking competition, frequently in small washes or other moisture-accumulating microsites, in the shadscale, mixed-shrub, sagebrush, and lower pinyon-juniper zones.

PHENOLOGY: flowering late-spring. Range of most frequent survey months: May-June.

LIFE-FORM AND HABIT: long-lived perennial herb from a buried root crown.

DESCRIPTION: not available (see references).

PHOTOGRAPHS: Weixelman and Atwood (1990); Nevada Natural Heritage Program slide collection (1986-present) and files.

ILLUSTRATIONS: Cronquist et al. (1984), Mozingo and Williams (1980), Weixelman and Atwood (1990).

OTHER GENERAL REFERENCES (listed separately): Goodrich (1981), Rhoads et al. (1979), Spahr et al. (1991).

SPECIFIC REFERENCES:

Barneby, R. C. 1945. A new species of *Asclepias* from Nevada. *Leaflets of Western Botany* 4: 210-211.

Welsh, S. 1981. Status report for *Asclepias eastwoodiana*. Portland, Oregon: U. S. Fish and Wildlife Service.

Woodbury, K. 1980. Status report for *Asclepias eastwoodiana*. Portland, Oregon: U. S. Fish and Wildlife Service.

Sclerocactus blainei Welsh & Thorne (1985)**BLAINE PINCUSHION****FAMILY:** *Cactaceae*, the cactus family.**SYNONYMS:** *Sclerocactus spinosior* ssp. *blainei***STATUS:****Heritage Program SENSITIVE LIST, ranks: G1G2Q S1****USFWS/ESA:** species of concern. **STATE OF NEVADA:** harvest regulated. **BLM:** Special Status Species in Nevada. **USFS:** none. **NNNPS:** watch list. **CITES:** Appendix II.**POPULATION CENSUS:** 3 occurrences mapped; total estimated individuals unknown, total estimated area unknown.
TREND: unknown.**IMPACTS AND MAJOR THREATS:** Most cacti subject to horticultural collecting.**INVENTORY EFFORT:** Not yet systematically surveyed in Nevada. Most recent entered survey 1981, average year of last survey 1980. **Years since last entered survey** (percent of mapped records at various survey ages): **11-20 yrs:** 33.3%; **21-30 yrs:** 66.7%.**LAND MANAGEMENT** in decreasing predominance: U. S. Bureau of Land Management, private lands (?).**RANGE:** Nye County, Nevada; also in UT (?). Possible or probable Nevada endemic. Maximum range dimension **88.7 km (55.1 mi)**. **Type specimen** collected in Nye County.**ELEVATIONS RECORDED (NEVADA):** 5100-5300 feet (1554-1615 meters).**HABITAT:** Alkaline calcareous and volcanic gravelly-clay soils in open valley bottom areas in the shadscale and lower sagebrush zones with *Sarcobatus vermiculatus*, *Pleuraphis jamesii*, *Atriplex confertifolia*, *Artemisia tridentata*, *Ericameria nauseosa*, etc.**PHENOLOGY:** flowering late-spring. Range of most frequent survey months: May-June.**LIFE-FORM AND HABIT:** cactus.**DESCRIPTION:** A spiny succulent with an oval stem, 3-15 cm tall. Pink-purple flowers are borne at the tops of the stems in spring.**PHOTOGRAPHS:** none known.**ILLUSTRATIONS:** Welsh and Thorne (1985).**SPECIFIC REFERENCES:**Heil, K. D. and J. M. Porter. 1994. *Sclerocactus* (Cactaceae): a revision. *Haseltonia* 2: 20-46.Hochstaetter, F. 1992. Nieuwe combinaties in het geslacht *Sclerocactus*. *Succulenta* 74: 38-44.Welsh, S. L. and K. H. Thorne. 1985. New *Sclerocactus* (Cactaceae) from Nevada. *Great Basin Naturalist* 45: 553-555.