

ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDAST3G010

Data Sensitivity: No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Enceliopsis argophylla* (D.C. Eaton) A. Nelson

**COMMON NAME:** Silverleaf sunray, Silver-leaf sunray, Silver-leaf enceliopsis, Panamint daisy

**SYNONYMS:** *Tithonia argophylla* D.C. Eaton

**FAMILY:** Asteraceae

**AUTHOR, PLACE OF PUBLICATION:** *Enceliopsis argophylla* (D.C. Eaton) A. Nelson, Bot. Gaz. 47(6): 433. 1909. *Tithonia argophylla* D.C. Eaton, Rep. U.S. Geol. Explor. 40<sup>th</sup> Parallel 5: 423. 1871.

**TYPE LOCALITY:** U.S.A., Utah, Washington County, from near St. George, or more likely from southern Nevada.

**TYPE SPECIMEN:** HT: YU (s.n.). E. Palmer s.n., 1870.

**TAXONOMIC UNIQUENESS:** Species *argophylla* is 1 of 4 species in the genus *Enceliopsis*.

**DESCRIPTION:** Scapose, caespitose perennials from a superficial branching caudex, 20-60 cm (7.87-23.62 in) tall. The herbage tomentulose, silvery white. Leaf blades are broadly rhombic-ovate to orbicular, 4 to 12 cm (1.57-4.72 in) long, gradually tapering to a winged petiole. Scapes stout, often with a reduced foliose bract. Disks 3.5-5.0 cm (1.4-1.97 in) in diameter; rays mainly 20-34, yellow, to 4 cm (1.57 in) long. Achenes are 10-12 mm long, broadly obovate, and silky villous; pappus lacking or of 2 subulate awns.

**AIDS TO IDENTIFICATION:**

**ILLUSTRATIONS:**

Color photos of flower and plant (*in* <http://www.csupomona.edu/~jcclark/encelia/graphics/arg-p.jpg>)

Color photo of plant (Christopher Christie, *in* <http://www.rangenet.org/directory/christiec/plants/asteraceae/ENAR.jpg>)

Color photo of plant in habitat (Sharon Johnson, 1978, *in* <http://geoimages.berkeley.edu/GeoImages/Johnson/Biomes/BiomesSub/PanamintDaisy.html>)

**TOTAL RANGE:** Almost entirely confined to Clark County, Nevada. Extends into the Beaver Dam Mountains in Washington County, Utah, and Mohave County in northern Arizona. Also reported near Wildrose Charcoal Kilns, Death Valley, California.

**RANGE WITHIN ARIZONA:** Mohave County: Lake Mead vicinity; Grapevine Mesa area; below Hurricane Cliffs; south of Hoover Dam; Boulder Dam area; Gyp Hills area; east of Littlefield. Collected by R.H. Peebles (#14654) in 1940 near Navajo Bridge in Coconino County (ARIZ s.n.).

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

**GROWTH FORM:** Caespitose perennial forb/herb.

**PHENOLOGY:** Flowers April to June.

#### **BIOLOGY:**

**HABITAT:** Warm desert shrub community on dry slopes and sandy washes. Clay and gypsum cliffs to gravelly slopes, and sandy washes.

**ELEVATION:** Ranges from about 705 – 3,400 ft (215-1036 m) in Mohave County, Arizona. Collected in 1940 in Coconino County at 3700 feet (1129 m). Elevation about 4,100 ft (1250 m) in Washington County, Utah (Welsh et al., 1993). In Nevada, collected at 1800 feet (549 m).

**EXPOSURE:** Northeast 10 +/- % slopes in Arizona.

**SUBSTRATE:** Clay and gypsum cliffs to gravelly slopes, and sandy washes. In Arizona, collected on limestone substrate. Dry slopes and sandy washes in Arizona (McDougall 1973). In Washington County, Utah, on Schnabkaib member of Moenkopi Formation (Welsh et al., 1993).

**PLANT COMMUNITY:** Desert shrub. Associated species include: *Arctomecon* (bearpoppy), *Atriplex* (saltbush), *Chilopsis linearis* (desert-willow), *Coleogyne ramosissima* (blackbrush), *Dalea* (prairie-clover), *Ephedra* (Mormon-tea), *Hymenoclea* (burrow-brush), *Larrea tridentata* (creosotebush), *Lepidium* (pepper-grass), *Pediocactus* (pincushion-cactus), and *Prunus*. In Nevada, associated with *Ambrosia dumosa* (white bursage), *Larrea tridentata*, *Lepidium fremontii* (Fremont's pepper-grass), and *Peucephyllum schottii* (Schott's pigmy-cedar).

**POPULATION HISTORY AND TRENDS:** Unknown.

**SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None  
**STATE STATUS:** None  
**OTHER STATUS:** Bureau of Land Management Sensitive (USDI, BLM AZ 2008, 2010)  
[Not BLM Sensitive (USDI, BLM AZ 2005)]  
[Bureau of Land Management Sensitive (USDI, BLM AZ 2000)]

**MANAGEMENT FACTORS:** In Nevada, threats are from recreational use of state and national park lands (NatureServe 2005).

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:**

**LAND MANAGEMENT/OWNERSHIP:** BLM – Arizona Strip and Kingman Field Offices; NPS – Lake Mead National Recreation Area; State Land Department; Private.

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

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#### MAJOR KNOWLEDGEABLE INDIVIDUALS:

#### ADDITIONAL INFORMATION:

**Revised:** 2002-05-30 (SMS)  
2005-04-28 (SMS)

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