Enceliopsis nudicaulis (A. Gray) A. Nelson var. corrugata Cronquist (1972)

ASH MEADOWS SUNRAY

FAMILY: Asteraceae, the sunflower family.

STATUS: Heritage Program SENSITIVE LIST, ranks: G5 T2 S2 USFWS/ESA: LISTED THREATENED. STATE OF NEVADA: FULLY PROTECTED. BLM: Special Status Species in Nevada. USFS: none. NNNPS: THREATENED.

POPULATION CENSUS: 11 occurrences mapped at 1.0 km (0.6 mi) separation, OR **15 occurrences mapped** at 0.16 km (0.1 mi) separation; total estimated **individuals 1849**+, total estimated **area 10.9**+ **ha (26.9**+ **ac)**. **TREND:** unknown.

IMPACTS AND MAJOR THREATS: Development, agriculture, proposed missile system.

INVENTORY EFFORT: Surveys substantially complete. Most recent entered survey 1986, average year of last survey 1979. **Years since last entered survey** (percent of mapped records at various survey ages): **11-20 yrs:** 60%; **21-30 yrs:** 6.7%; **31-50 yrs:** 33.3%.

LAND MANAGEMENT in decreasing predominance: U. S. Fish and Wildlife Service, U. S. Bureau of Land Management, private lands.

RANGE: Nye County, Nevada; also in CA (?). Apparently endemic to the Ash Meadows area, with a few intermediate populations found beyond. Maximum **range dimension 9.7 km (6.0 mi)** excluding most disjunct record. **Type specimen** collected in Nye County.

ELEVATIONS RECORDED (NEVADA): 2200-2360 feet (671-719 meters).

HABITAT: Dry to somewhat moist, open, hard, whitish, strongly alkaline silty to clay soils, often on or near low calcareous outcrops, in spring and seep areas in the creosote-bursage and shadscale zones with Atriplex confertifolia, Haplopappus acradenius, Distichlis spicata, Gutierrezia sarothrae, Krameria, Cryptantha confertiflora, Arctomecon merriamii, Mentzelia leucophylla, Astragalus phoenix, Ivesia kingii eremica, Grindelia fraxinopratensis, etc.

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

LIFE-FORM AND HABIT: perennial cushion.

DESCRIPTION: A perennial herb with grayish, basal leaves and leafless flower stalks, 1-4 dm high, each bearing a single yellow flower head. Flowers in April and May.

PHOTOGRAPHS: Nevada Natural Heritage Program images web page (1998-present), slide collection (1986-present), and files.

ILLUSTRATIONS: Mozingo and Williams (1980).

OTHER GENERAL REFERENCES (listed separately): Beatley (1976), Beatley (1977), Beatley (1977).

SPECIFIC REFERENCES:

Cronquist, A. 1972. A new variety of Enceliopsis nudicaulis (Asteraceae) from southern Nevada. Bulletin of the Torrey Botanical Club 99: 246-247.

OF FURTHER INTEREST: Reported from Death Valley in California, but these may represent intermediate populations, and need to be further verified.