YERMO XANTHOCEPHALUS
DEsert yellowhead
Family: Asteraceae

Status:
Agency Status: Recognized as Threatened.

Heritage Rank:
Global: G1 State: S1
WYNDD Plant List: State Endemic (Very High Conservation Priority)

Description: Desert yellowhead is a tap-rooted, glabrous perennial herb with leafy stems to 30 cm high. The leathery leaves are alternate, lance-shaped to oval, 4-25 cm long, and often folded along the midvein. Leaf edges are smooth or toothed. Flower heads are numerous (25-180) and crowded in a broad terminal inflorescence. Each head contains 4-6 yellow disk flowers (ray flowers are absent) surrounded by five yellow, keeled involucre bracts. The pappus consists of numerous white bristles (Fertig 1995).

Similar Species: Rayless species of groundsel (such as Senecio hydrophilus and S. rapifolius) can be distinguished by their more numerous and green involucre bracts. Dorn considers Yermo to be most closely related to species of Cacalia, a genus native to forests of eastern North America.

Flowering/Fruiting Period: June-July.
Reproduces by seed. Annual fruit production appears to be low due to insect and drought-induced abortion. Mature plants may spread by rhizomes (although this remains to be shown). Seed germination experiments by Dr. Dick Scott have shown that seeds have a
higher germination rate when given a warm treatment rather than a cold treatment. This suggests that seeds may germinate the same season they are produced.

**Distribution:** Endemic to the Sweetwater River Plateau in Fremont County, Wyoming.

**Habitat:** *Yermo xanthocephalus* occurs in sparsely vegetated cushion plant communities on low slopes, rim margins, colluvial fans, and bottoms within deflation hollows. Associated species include *Arenaria hookeri, Astragalus kentrophyta, Cryptantha caespitosa, Haplopappus nuttallii, Ivesia gordonii, Phlox muscoides, P. pungens, & Senecio canus*. It is typically absent from surrounding areas dominated by Wyoming big sagebrush, bluebunch wheatgrass, and needle-and-thread. *Y. xanthocephalus* is occasionally found in beds of seldom-used two-tracks. Soils occupied by this species are dry, shallow, silty-clay entisols derived from the Miocene-age Split Rock Formation (Fertig 1994).

**Occurrences in Wyoming:** Known from a single occurrence in Wyoming (and globally), last observed in 2001. Surveys from 1990-2001 have failed to document additional sites.

**Abundance:** The population was originally reported as ca 500 individuals by Dorn (1991). This did not include all subpopulations and underestimated nonflowering plants. Richard Scott of Central Wyoming College has been conducting annual population censuses since 1995 and has documented an increase from 9293 plants to 13,244 plants in 2000 (Scott 2000).

**Trends:** Monitoring by Richard Scott (1995-2001) found the population trends to be relatively stable and increasing overall.

**Protection status:** The Cedar Rim site is managed for multiple use. The area has been recommended for ACEC status by Fertig (1995).

**Threats:** Potential threats include construction associated with oil and gas development (including trampling or blasting by seismic studies), off-road vehicle trampling, mining, and trampling by livestock. The plant's small population size and range makes it extremely vulnerable to extinction due to chance, natural events or human-induced disturbances.

**Managed Areas:** Occurs on lands managed by the BLM Lander Field Office.
Wyoming distribution of Yermo xanthocephalus.

References:


Author: Walter Fertig and Bonnie Heidel
Updated: 02-03-30