

Howell's microseris (*Microseris howellii*)



THREATENED



Flowers (left), habit (center), and habitat (right) of Howell's microseris. Photos by Ryan Woolverton (left and right) and Melissa Carr (center). If downloading images from this website, please credit the photographer.

Family

Asteraceae

Plant description

Howell's microseris is a taprooted perennial 10-50 cm tall, usually with a single, slender, erect stem branched proximally and often distally. Leaves are chiefly basal; linear to narrowly lanceolate or oblanceolate; 10-30 cm long; the margins entire, dentate, or pinnately lobed, the lobes slender and often curved downward or backward. Involucres are narrowly ovoid in fruit and 8-17 mm high, the involucral bracts acuminate with erect apices, sometimes purple-spotted, the abaxial faces glabrous or scurfy-puberulent, the outer bracts lanceolate to deltate, the inner bracts lanceolate. Flower heads are nodding before anthesis and bear 8-30 yellow ray flowers, the corollas exceeding the involucral bracts by 5 mm or more. Achenes are brown, 3.5-7 mm long, and narrowed at the base. Pappi of 5-10 white, lanceolate, glabrous, awned scales 3-6 mm long, awns minutely barbed.

Distinguishing characteristics

A few other members of the Asteraceae are similar in appearance to Howell's microseris and are known to occur within or near its range: *Microseris bigelovii*, *M. laciniata* ssp. *leptosepala*, *M. l.* ssp. *siskiyouensis*, and *Uropappus lindleyi*. *Microseris bigelovii* is distinguished from Howell's microseris by its annual nature (versus perennial), flower heads with shorter, yellow to orange corollas that equal or exceed the involucral bracts by 1-3 mm (versus yellow corollas that exceed the bracts by 5 mm or more), and 5 pappus scales 1-4 mm long (versus 5-10 that are 3-6 mm long) that are silvery to blackish in color with fine brown awns (versus white scales and awns); *M. laciniata* ssp. *leptosepala* has flower heads with 13-300 florets (versus 8-30) and shorter pappus scales (0.5-2.5 mm long versus 3-6 mm); *M. l.* ssp. *siskiyouensis* has flower heads with 13-300 florets (versus 8-30) and 9-24 pappus scales 0.5-2 mm long (versus 5-10 that are 3-6 mm long); and *Uropappus lindleyi* is an annual (versus perennial) with flower heads bearing 5-150 florets with pale yellow corollas equal to or barely exceeding the involucral bracts (versus 8-30 florets with yellow corollas that

exceed the bracts by 5 mm or more) and 5 pappus scales notched at the base of the awns (versus 5-10 pappus scales lacking notches).

When to survey

Howell's microseris blooms from late April to June, with fruiting typically beginning in May. Because fruits are needed to positively distinguish this species from other similar members of the Asteraceae, surveys should be completed from mid May to early July.

Habitat

Howell's microseris is found on hillsides and alluvial flats, open shrublands, and *Pinus jeffreyi* savannas in rocky serpentine soils at elevations ranging from 300-1000 m (980-3280 ft).

Associated plant species include *Achnatherum lemmonii*, *Agoseris* sp., *Allium falcifolium*, *Arabis aculeolata*, *Arbutus menziesii*, *Arctostaphylos viscida*, *Aspidotis densa*, *Boechera subpinnatifida*, *Calamagrostis howellii*, *Calocedrus decurrens*, *Camassia howellii*, *Ceanothus cuneatus*, *C. pumilus*, *Collomia grandiflora*, *Convolvulus* sp., *Danthonia californica*, *D. unispicata*, *Eriogonum nudum*, *E. pendulum*, *Eriophyllum lanatum*, *Festuca idahoensis*, *F. rubra*, *Hieracium* sp., *Horkelia sericata*, *Lomatium macrocarpum*, *L. nudicaule*, *Packera cana*, *P. hesperia*, *Perideridia oregana*, *Pinus jeffreyi*, *Pseudostuga menziesii*, *Silene hookeri*, *Toxicodendron diversilobum*, and *Uropappus lindleyi*.

Range

Howell's microseris is restricted to serpentine regions in southwestern Oregon within the Klamath Mountains ecoregion. The majority of occurrences are located in Josephine County, with a few records from Curry County. The present status of the Curry county occurrences is unknown.

Oregon counties

Curry, Josephine

Federal status

None

Threats

The potential strip mining of nickel from the serpentine slopes inhabited by Howell's microseris poses one of the most significant threats to the species. Other threats include gravel mining and grazing.

Did you know?

This species was first collected in 1884 by Thomas Howell, who discovered a wealth of new plant species, including many from the Siskiyou Mountains of Curry and Josephine counties. Howell's microseris was described by Asa Gray the following year and named in honor of its discoverer.

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