

Microseris bigelovii Gray. Shultz-Bip.

coast microseris
Asteraceae (Aster Family)

Status: State Possibly Extirpated

Rank: G4SX

General Description: Adapted from Hitchcock et al. (1955) and Hickman (1993): *Microseris bigelovii* is a glabrous or scurfy annual, 1.6 to 14 in. (4-35.5 cm) tall, with 1 or several erect or curved-ascending leafless flower stalks (scapes) from the base. All the leaves are basal, up to 7¾ in. (20 cm) long, usually with spreading, linear lobes, but sometimes linear and entire. The solitary flower heads are borne on leafless flower stalks (scapes). The 5-100 flowers have yellow or orange strap-shaped petals. The involucre (whorl of greenish bracts below the flowers) is usually ¼ to ½ in. (6-15 mm) long, and is subtended by small bracts. The achenes (fruits) are 1/8 to ¼ in. (3.5-6 mm) long, widest at the middle, grayish-straw colored to light or medium brown, and squared off or slightly narrowed towards the tip. At the tip of the achenes are five scales that are silvery to blackish, and curved at the base. The basal chaffy parts of the scales are lanceolate and glabrous or rough to the touch. The scale tapers to a hair-like bristle (awn), which is slightly to conspicuously longer than the wider portion of the scale.

Identification Tips: Within Washington *Microseris bigelovii* may be mistaken for *Agoseris heterophylla*, which is common in western Washington, and can be distinguished by the following. *M. bigelovii* is a glabrous or scurfy annual, with leaves that have linear lobes, but are sometimes linear and entire, whereas *A. heterophylla* is a conspicuously pubescent annual, with leaves that are oblanceolate, toothed to deeply lobed or entire. The achenes of *M. bigelovii* are 1/8 to ¼ in. (3.5-6 mm) long, and lack beaks, while the achenes of *A. heterophylla* are 1/16 to 1/8 in. (2-5 mm) long, and are prominently beaked.

Phenology: In Washington, *Microseris bigelovii* has been observed flowering in May. *M. bigelovii* tends to flower only in the cool of the morning, then its involucre closes tightly around the head, and the scape bends downward until the next morning. The scapes also droop when the flowers are in bud, and for a period between anthesis and seed shed (Fairbarns in litt. 2003).

Range: This species is distributed along the coast from southern Vancouver Island, to California. In Washington it is historically known from San Juan County.

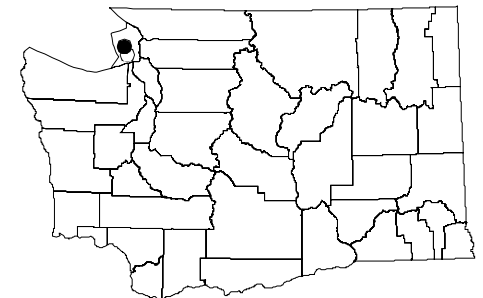
Microseris bigelovii

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Known distribution
of *Microseris bigelovii*
in Washington



- Current (1980+)
- Historic (older than 1980)

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Habitat: In Washington, *Microseris bigelovii* was found in grasslands, on old dunes and on glacial deposits, in small crevices, and on rock usually with very little soil, 6 to 10 feet (1.8-3 m) above the high tide line, with red fescue (*Festuca rubra*), annual bluegrass (*Poa annua*), seaside goldfields (*Lasthenia minor* var. *maritima*) and Puget Sound gumweed (*Grindelia integrifolia*).

Ecology: This species may benefit from nutrition provided by bird droppings, in their nearly soil-less rock habitats.

State Status Comments: This species is known from one historical record in 1923 and one occurrence from 1983, believed to be extirpated. No individuals have been seen in Washington since 1983.

Inventory Needs: Appropriate habitats in San Juan County should be surveyed on cool mornings for additional populations.

Threats and Management Concerns: Shoreline erosion may have contributed to the demise of one or more populations, along with invasion by weedy species.

References:

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