Tall Beggarticks (*Bidens vulgata*) Asteraceae (Sunflower Family)

Status: Red / Not Assessed Best Survey Time: Jul to Sep General Habitat: Wetland

RANGE

- Found in North America across most of the continental United States and southern Canada
- In British Columbia, found in the Lower Mainland, south Kootenays and Southern Interior
- In the Thompson Okanagan Region, known from Kamloops and historically from outside Osoyoos

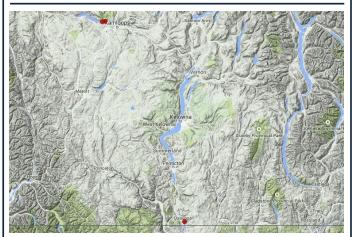


Figure 1 Thompson Okanagan Region distribution of *Bidens vulgata* (BC CDC 2014)

HABITAT

- Wet meadows, ditches, streambanks and lakeshores at middle and lower elevations
- Thompson Okanagan Region populations occur at wet sites within the Interior Douglas Fir and Ponderosa Pine Biogeoclimatic Zones
- Associates include reed canarygrass (*Phalaris arundinacea*), sedges (*Carex* spp.), goldenrod (*Solidago* spp.), aster and rose (*Rosa* spp.)



Figure 2 Bidens vulgata (a) growing in a wetland fringe habitat and (b) close-up of pinnately compound leaf



Figure 3 Tall, many-flowered plants with reddish stems and spreading branches

LIFE HISTORY

- Annual herb that flowers between late summer to early fall
- Plants show some evidence of being able to grow in somewhat disturbed habitats
- Does not reproduce vegetatively, so population survival depends on seeds and seed bank
- Seed dispersal by mammals (barbed, two-prong seeds catch in fur, allowing long-distance dispersal) or by embedding in mud within the source population
- May be subject to large annual population fluctuations due to varying environmental conditions

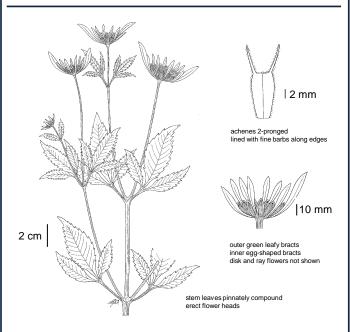


Figure 4 Illustration of *Bidens vulgata* (Douglas et al. 1999)

Bidens vulgata (continued)

DESCRIPTION

General

- Annual herb growing from fibrous roots with erect, branched, reddish stems
- Up to and occasionally taller than 1.5 m

Leaves

- Stem leaves pinnately compound, with 3 to 5 lanceolate and toothed leaflets, 5-15 cm long
- Basal leaves lacking at flowering time

Flowers

- Flower heads composed of two types of flowers: (i)
 many tiny, yellow, tubular disk flowers in the centre
 of the head; and (ii) 1 to 5 short, yellow, ray flowers
 at the edge of the head
- Flower heads erect and subtended by two dissimilar series of bracts: (i) outer green leafy bracts, 8 to 12, hairy at least along the margins, 1 to 2 cm long; and (ii) inner egg-shaped bracts, 0.7 to 1.2 cm long

Fruits

 Achenes, 2-pronged, olive-green to brown, lined with many fine barbs along their edges, 6 to 12 mm long



Figure 5 Close-up of flower head showing leafy outer bracts, all disk flowers open and achene prongs pointing out between them

IDENTIFICATION TIPS

- On plants with few to no ray flowers, B. vulgata is most similar to common beggarticks (B. frondosa), a shorter species with smaller, orange flower heads
- On plants with ray flowers present, nodding beggarticks (*B. cernua*) appears similar and occurs in same habitat, but is easily distinguished by its simple, undivided leaves and nodding heads
- Blue-listed Vancouver Island beggarticks (B. amplissima) is restricted to southern Vancouver Island and the Lower Mainland; it has ray flowers and nodding heads



Figure 6 Cross section of a maturing flowering head showing the arrangement of the 2-pronged achenes and the position of the disk flowers atop the achenes

GENERAL THREATS AND GUIDANCE

- Avoid development in areas with known occurrences of *Bidens vulgata* through project relocation or redesign
- Protect wetland habitats from disturbance and development, including excessive trampling from cattle
- Monitor the impact of invasive species, such as reed canarygrass, on available habitat
- Follow provincial methods for when and how to conduct plant species at risk surveys
- Follow provincial policy and guidance on how to avoid, minimize, restore and offset impacts to plant species at risk and their habitats
- Report any sightings to the B.C. Conservation Data Centre (<u>cdcdata@gov.bc.ca</u>) and FLNR Ecosystems Section (<u>josie.symonds@gov.bc.ca</u>)

REFERENCES

B.C. Conservation Data Centre. 2014. http://a100.gov.bc.ca/pub/eswp/

Douglas et al. (editors). 1999. *Illustrated Flora of British Columbia*. Vol. 1. B.C. Min. Environ., Lands and Parks, and Min. For., Victoria, B.C.

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