

Blue Vervain (*Verbena hastata* var. *scabra*) Verbenaceae (Vervain Family)

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

<u>RANGE</u>

- Found in North America from southern Canada south to Florida and west to California (USA)
- In British Columbia, found in the Lower Mainland, Fraser Valley, Vancouver Island and Southern Interior, including the Okanagan and Similkameen Valleys from Sicamous south to Osoyoos Lake

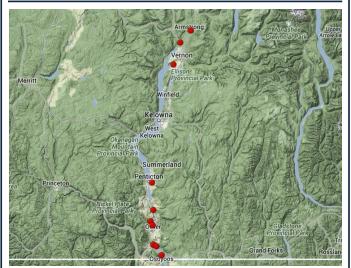


Figure 1 Thompson Okanagan Region distribution of Verbena hastata (BC CDC 2013)

<u>HABITAT</u>

- In B.C. interior, found in moist to wet meadows and marshes in the Bunchgrass and Ponderosa Pine Biogeoclimatic Zones, as well as abandoned farm fields and irrigation ditches
- Associates include hard-stemmed bulrush (Schoenoplectus acutus), various wetland grasses and sedges (Carex spp.)



Figure 2 Marsh habitat along an Okanagan River oxbow, B.C.



Figure 3 Cattail marsh habitat near Osoyoos, B.C. (with blue-listed *Berula erecta*)

LIFE HISTORY

- Perennial species that blooms from July into September
- Seeds mature and are released through the late summer into autumn
- Vegetative reproduction via rhizomes (horizontal roots) that produce new plants, as well likely via seed in open, wet soil

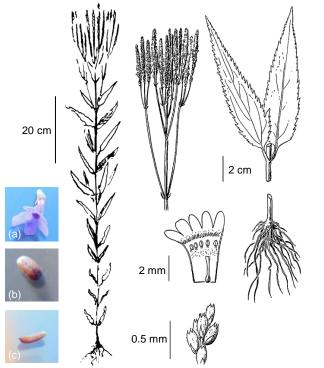


Figure 4 Illustration of *Verbena hastata* by Jeanne R. Janish (Hitchcock et al. 1969); inset: (a) flower, (b) cluster of four nutlets and (c) individual nutlet (©2014 Josie Symonds)

Verbena hastata var. scabra (continued)

DESCRIPTION

<u>General</u>

- Tall perennial plant, usually 75 to 150 cm in height
- Grows from a mat of fibrous roots and rhizomes
- Stems hairy, 4-angled

<u>Leaves</u>

- Leaves lance-shaped, sharply pointed, and from 4 to 15 cm long, arranged in opposite pairs along stem
- Leaves short-hairy, with sharply toothed margins, and short (1 to 2 cm long) stalks (petioles)
- Basal leaves absent

Flowers

- Numerous violet, sometimes blue flowers densely arranged in series of 3 to 10 cm long spikes at ends of branches at top of plant
- Flower spikes give plant a flat-topped or rounded appearance
- Individual flowers 2.5 to 5 mm long and tubular at the base, with 5 spreading lobes above
- Sepals egg-shaped and 2.5 to 3 mm long

Fruits

 Four, 1.5 to 2 mm, reddish-brown, triangular-convex nutlets (seeds covered by a hard layer)





IDENTIFICATION TIPS

- Characterized by tall stature, opposite lance-shaped leaves, and the conspicuous violet flower spikes
- Purple loosestrife (*Lythrum salicaria*) resembles *V.* hastata from a distance but is easily distinguished by its reddish purple to pink flowers with separate nontubular petals, which produce capsules rather than nutlets to distinguish these species in autumn
- Bracted vervain (Verbena bracteata), a small prostrate plant of dry, disturbed sites, mainly roadsides and parking lots, is the only other Verbena species in B.C.



Figure 6 Close up showing dense violet flower spikes

GENERAL THREATS AND GUIDANCE

- Avoid development in areas with known occurrences of Verbena hastata var. scabra through project relocation or redesign
- Protect wet meadow and marsh habitats from disturbance and development, including exclusion of livestock through fencing, and consider restoration including invasive plant removal following professional advice
- 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 (cdcdata@gov.bc.ca) and FLNR Ecosystems Section (josie.symonds@gov.bc.ca)

REFERENCES

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