

Blue Vervain

Verbena hastata var. *scabra*

Verbenaceae (Vervain Family)

- Status: Blue / Not Assessed
- Best Survey Time: July to September
- General Habitat: Wetland

RANGE

- 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

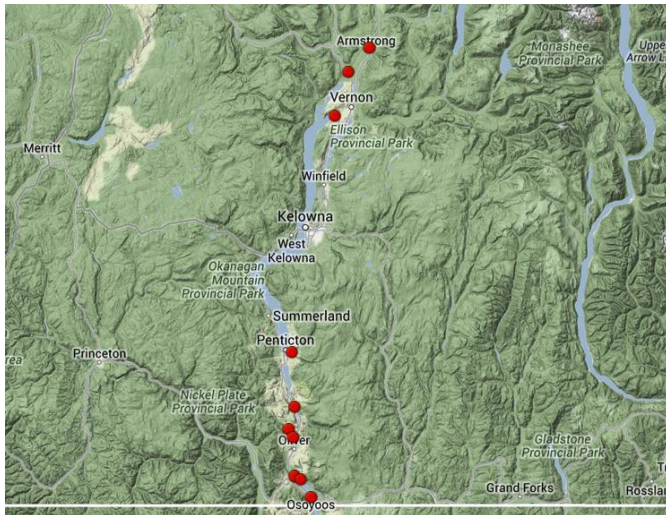


Figure 1 Thompson Okanagan Region distribution of *Verbena hastata* (BC CDC 2013)

HABITAT

- 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 Lakeshore marsh habitat near Vaseux Lake, 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

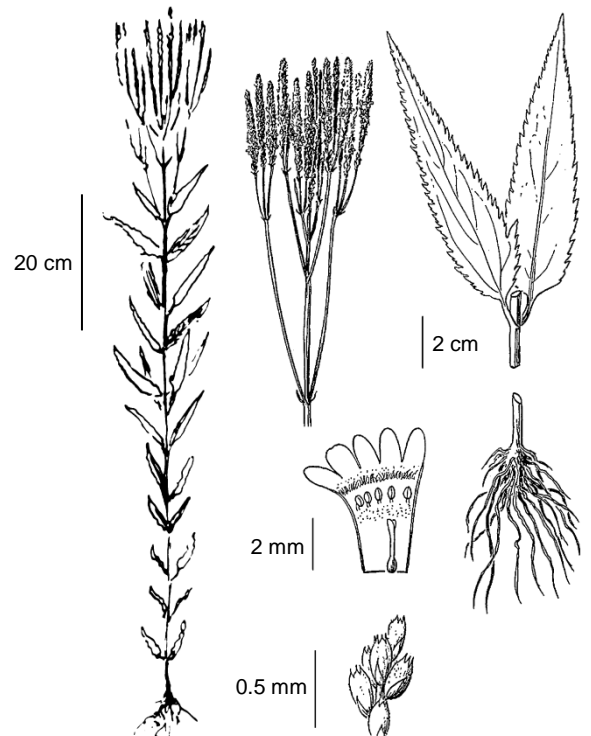


Figure 4 Illustration of *Verbena hastata* by Jeanne R. Janish (Hitchcock et al. 1969)

Verbena hastata var. *scabra* (continued)

DESCRIPTION

General

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

Leaves

- 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)



Figure 5 Typical plant with tall stature and opposite, toothed leaves

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 readily distinguished by its reddish purple to pink flowers with separate non-tubular 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
- Provincial methods for when and how to conduct rare plant surveys, as well as guidance on mitigation measures for this species can be found in *Guidance for Plant Species at Risk in the Okanagan: Foreshore, Riparian & Wetland Developments*
- Report any sightings to the BC Conservation Data Centre (cdccdata@gov.bc.ca) and MFLNRO Ecosystems Section (josie.symonds@gov.bc.ca)

REFERENCES

- BC Conservation Data Centre. 2013. <http://a100.gov.bc.ca/pub/eswp/>
- Douglas et al. (editors). 2000. *Illustrated Flora of British Columbia*. Vol. 5. BC Min. Environ., Lands and Parks, and Min. For., Victoria, B.C.
- Hitchcock et al.. 1969. *Vascular Plants of the Pacific Northwest*. Univ. Washington Press, Seattle, W.A.
- Klinkenberg, Brian (editor). 2013. E-Flora BC. [http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Verbena hastata var. scabra](http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Verbena+hastata+var.+scabra)
- NatureServe. 2012. <http://www.NatureServe.org/explorer>

ACKNOWLEDGEMENTS

Verbena hastata var. *scabra* Plant Species at Risk Fact Sheet developed by Josie Symonds based on content produced under contract by Terry McIntosh and review comments from Brenda Costanzo and Orville Dyer