

Wedgescale Orache (*Atriplex truncata*)

Amaranthaceae (Amaranth Family)

Status: Blue / Not Assessed

Best Survey Time: Jul to Sep

General Habitat: Wetland

RANGE

- Found in North America from southern British Columbia, Alberta and Saskatchewan south to California and New Mexico (USA)
- In B.C., known only from several sites near Williams Lake, Spences Bridge, Kamloops and Osoyoos



Figure 1 Thompson Okanagan Region distribution of *Atriplex truncata* (BC CDC 2014)

HABITAT

- Seasonally moist swales in open grassland and shrubland, with saline or alkaline soils in the Interior Douglas Fir, Ponderosa Pine and Bunchgrass Biogeoclimatic Zones
- Sometimes in badly disturbed sites
- Associates include alkali saltgrass (*Distichlis spicata*), alkali muhly (*Muhlenbergia asperifolia*), Douglas' sedge (*Carex douglasii*) and tufted white prairie aster (*Symphyotrichum ericoides*)



Figure 2 Shallow swale habitat with many small wedgescale orache



Figure 3 Plants at the margin of a salt flat in an upper elevation grassland near Kamloops, B.C.

LIFE HISTORY

- Annual species that flowers at the end of July and into September
- Seeds mature and are released through late summer and into autumn
- Does not reproduce vegetatively, so population survival depends on seeds and seed bank
- Seed dispersal by gravity, wind or small mammals
- May be subject to large annual population fluctuations due to varying environmental conditions

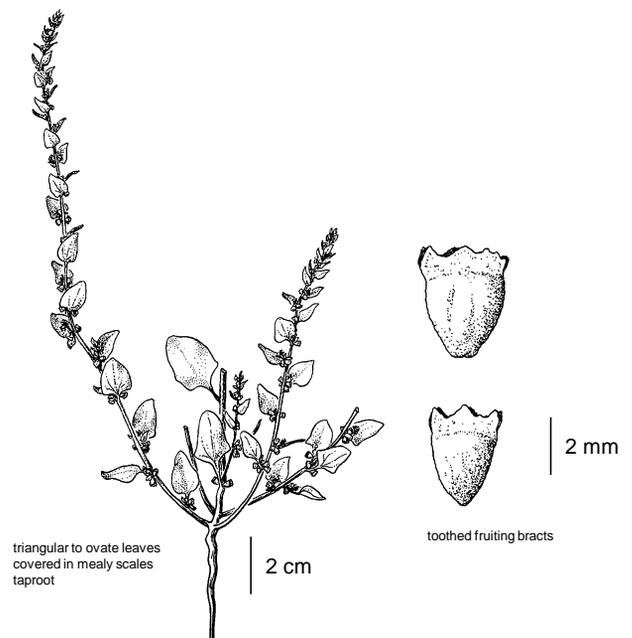


Figure 4 Illustration of *Atriplex truncata* by Jeanne R. Janish (Hitchcock et al. 1969)

Atriplex truncata (continued)

DESCRIPTION

General

- Annual taprooted herb with simple to branched stems, 25 to 120 cm tall, covered in mealy scales

Leaves

- Lower leaves opposite, upper leaves alternate,
- Leaves triangular to ovate, 15 to 40 mm long, with more or less entire margins and short petioles (stalks)
- Leaves silvery, due to covering of mealy scales

Flowers

- Small, unisexual flowers borne in axillary clusters
- Male flowers lack petals but have 5-parted calyx
- Female flowers lack both petals and calyx; enclosed by two thick, wedge-shaped bracts that are narrowly fan-shaped, flat and toothed across the top, 2 to 3 mm long

Fruits

- Membranous bladders contained in two wedge-shaped bracts, seeds 1.5 mm long



Figure 5 Mature individual occurring in a seasonally wet, saline site and showing axillary clusters of numerous flowers

IDENTIFICATION TIPS

- No other orache in B.C. has fruiting bracts with the truncate, toothed apex (top) of *A. truncata*
- In B.C., wedgescale orache is most similar to silvery orache (*Atriplex argentea*), a shorter species having thicker fruiting bracts that are 4 to 10 mm long with a round outline and large teeth along the sides
- Red orache (*A. rosea*) and Russian orache (*A. micrantha*), introduced from Europe, overlap in range but have larger leaves and lack the narrow fan-shaped fruiting bracts

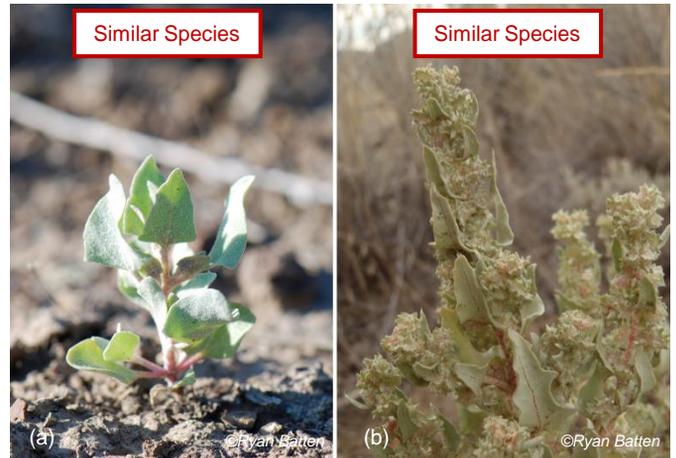


Figure 6 *A. argentea* (silvery orache), shown here as (a) young and (b) mature plants, is the most similar species to *A. truncata*; these two species are distinguished by their fruiting bracts (not shown)

GENERAL THREATS AND GUIDANCE

- **Avoid development in areas with known occurrences of *Atriplex truncata* through project relocation or redesign**
- Protect saline wetland habitats from disturbance and development (including overgrazing by cattle) and restrict ATV use in sensitive areas
- 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 (cdccdata@gov.bc.ca) and FLNR Ecosystems Section (josie.symonds@gov.bc.ca)

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. 2. B.C. 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, WA
- Klinkenberg, Brian (editor). 2014 E-Flora BC <http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Atriplex%20truncata>

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