

Cut-leaved Water-Parsnip (*Berula erecta*)

Apiaceae (Carrot Family)

Status: Blue / Not Assessed

Best Survey Time: Jul to Aug

General Habitat: Wetland

RANGE

- Found in North America in British Columbia, Ontario and most of the western to central continental United States
- In B.C., known from five locations in the Okanagan and at least two extant sites in the Lower Mainland

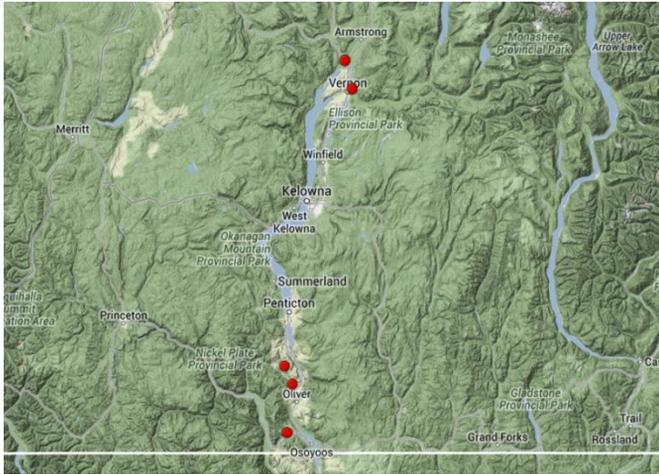


Figure 1 Thompson Okanagan Region distribution of *Berula erecta* (BC CDC 2014)

HABITAT

- Marshy lakeshores, wet ditches and stream margins
- Often in standing, sometimes stagnant water, stranded or (rarely) in alkaline conditions in the Bunchgrass, Ponderosa Pine, Interior Douglas-fir and Coastal Western Hemlock Biogeoclimatic Zones
- Associates include common cattail (*Typha latifolia*), field mint (*Mentha arvensis*), stinging nettle (*Urtica dioica*), American speedwell (*Veronica beccabunga*) rushes (*Juncus* spp.) and horsetails (*Equisetum* spp.)



Figure 2 Cattail marsh habitat near Osoyoos (with *Verbena hastata*)



Figure 3 Flowering plants in typical habitat

LIFE HISTORY

- Perennial species that blooms from July to September
- Fruits mature and are released in the late summer and autumn
- Plants usually continue to bloom while early fruits mature
- Vegetative reproduction via stolons (horizontal stems) that produce new plants

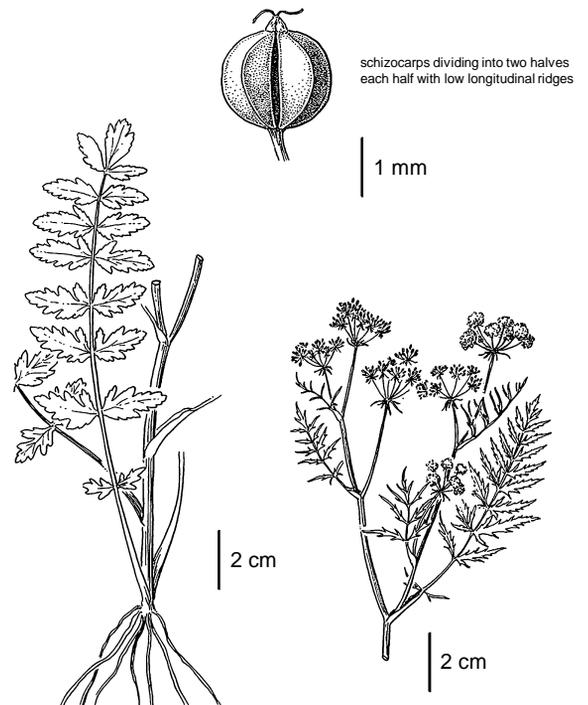


Figure 4 Illustration of *Berula erecta* by Jeanne R. Janish (Hitchcock et al. 1969)

Berula erecta (continued)

DESCRIPTION

General

- Tall perennial plant, stems decumbent to erect, hairless, usually 20 to 80 cm tall
- Grows from fibrous roots and stolons

Leaves

- Basal leaves withering, lower stem leaves once-divided with irregularly toothed leaflets along a central axis
- Upper stem leaves similarly divided with leaflets narrower and more sharply toothed

Flowers

- Numerous, tiny white flowers in radiating umbel inflorescences
- Inflorescences subtended by lobed involucre bracts (modified leaves)
- Usually several to many flower clusters on any one plant

Fruits

- Fruits are schizocarps (dry fruit that splits into two, each half enveloping a single seed)
- Fruits abundant, globose, dividing into two halves, each half with low longitudinal ridges



Figure 5 Close-up of flowering plant with early fruits; (inset: close-up of mature fruits)

IDENTIFICATION TIPS

- Characterized by its lobed involucre bracts, a rare trait in Apiaceae
- Superficially resembling the water-hemlocks (*Cicuta* spp.) but with smaller flower clusters, only once-divided leaves and with veins that terminate in the leaf teeth rather than between them
- Western cowbane (*Oxypolis occidentalis*) has also been confused with *Berula erecta*; the former has simpler stems, undivided bracts and grows in coastal bogs



Figure 6 Basal leaf with irregular lobes and rounded teeth

GENERAL THREATS AND GUIDANCE

- **Avoid development in areas with known occurrences of *Berula erecta* through project relocation or redesign**
- Protect foreshore and marshy areas from disturbance, including exclusion of livestock and ATVs through fencing and/or signage, 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 (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/>
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