

# Western Centaury (*Zeltnera exaltata*) Gentianaceae (Gentian Family)

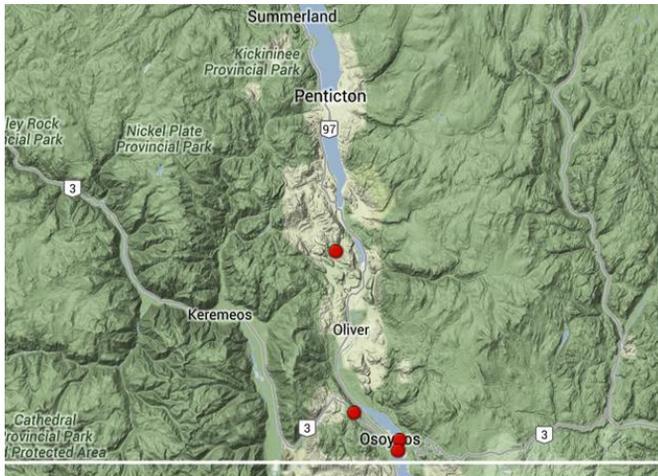
 Status: Red / Not Assessed ■

 Best Survey Time: Jul to Aug ■

 General Habitat: Wetland ■

## RANGE

- Found in North America from south British Columbia south to New Mexico and east to Utah (USA)
- In B.C., only known from south Okanagan Valley, from Mahoney Lake to Osoyoos Lake
- Other occurrences near Oliver, Kamloops Lake and Richter Pass are either historical or have not been verified within the past 10 years



**Figure 1** B.C. distribution of *Zeltnera exaltata* (BC CDC 2013)

## HABITAT

- Open, spring/summer moist soils in saline meadows or depressions alongside lakes in the Ponderosa Pine and Bunchgrass Biogeoclimatic Zones
- Associates include alkali saltgrass (*Distichlis spicata*), rush species (*Juncus* spp.), common witchgrass (*Panicum capillare*), foxtail barley (*Hordeum jubatum*) and American bulrush (*Schoenoplectus pungens* var. *longispicatus*)



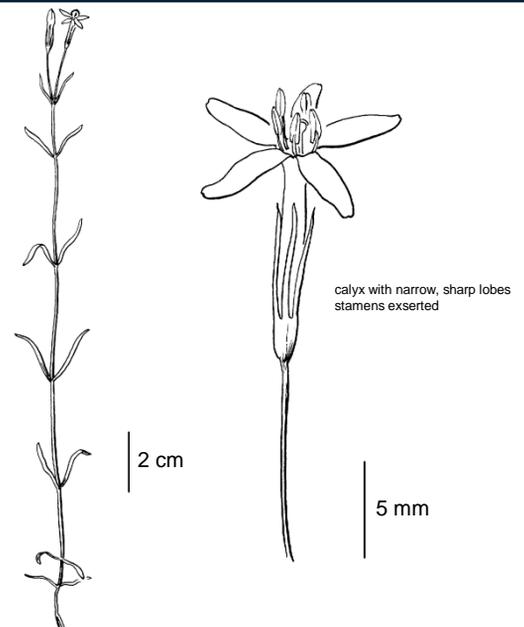
**Figure 2** Moist saline meadow habitat near Mahoney Lake, B.C.



**Figure 3** Moist saline meadow habitat near Osoyoos Lake, B.C.

## LIFE HISTORY

- Annual species that grows each year from seed, germinating in May or early June and flowering from July into September
- Fruiting occurs throughout the summer into September, and seeds are released into seed bank when the capsules dry and split open
- Does not reproduce vegetatively, so population survival depends on seeds and seed bank
- Seed dispersal by water, waterfowl or small mammals
- May be subject to annual population fluctuations due to varying environmental conditions



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

# Zeltnera exaltata (continued)

## DESCRIPTION

### General

- Small, hairless, annual herb
- One to several, simple or branched, thin stems that grow from a tiny taproot
- Plants vary in height from 5 to 25 cm, although sometimes taller in optimum conditions

### Leaves

- Narrow lanceolate or oblong leaves arranged in opposite pairs along the stems
- Leaves mostly 10 to 20 mm long, more or less erect
- Basal leaves generally broader and shorter, but wither with age, usually absent at maturity

### Flowers

- Individual flowers on short, 1 to 4 cm long stalks, produced at top of stems or from bases of the upper leaves
- Petals (4 to 5) pink (rarely white), fused below forming a 15 mm long tube and flared above into 2.5 to 7 mm lobes
- Petals surrounded by a green calyx composed of fused sepals, 6 to 9 mm long, and divided above into narrow, sharp lobes
- Bright yellow stamens are exerted above the petals

### Fruits

- Fruits are slender capsules, 12 to 18 mm long, containing numerous, small, egg-shaped, pitted, and brown seeds



Figure 5 Thin-stemmed, branched plant with 4 to 5 petals per flower

## IDENTIFICATION TIPS

- Characterized by a thin and delicate appearance and small pink flowers with bright yellow centers
- No other plant can be confused with it in its habitat of saline wetlands



Figure 6 Close-up showing pink petals and bright yellow stamens

## GENERAL THREATS AND GUIDANCE

- **Avoid development in areas with known occurrences of *Zeltnera exaltata* through project relocation or redesign**
- Protect saline wetland and meadow habitats from disturbance and development, 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](mailto:cdccdata@gov.bc.ca)) and FLNR Ecosystems Section ([josie.symonds@gov.bc.ca](mailto:josie.symonds@gov.bc.ca))

## REFERENCES

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## ACKNOWLEDGEMENTS

*Zeltnera exaltata* 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