

# Yellowseed False Pimpernel (*Lindernia dubia* var. *dubia*)

## Linderniaceae (False Pimpernel Family)

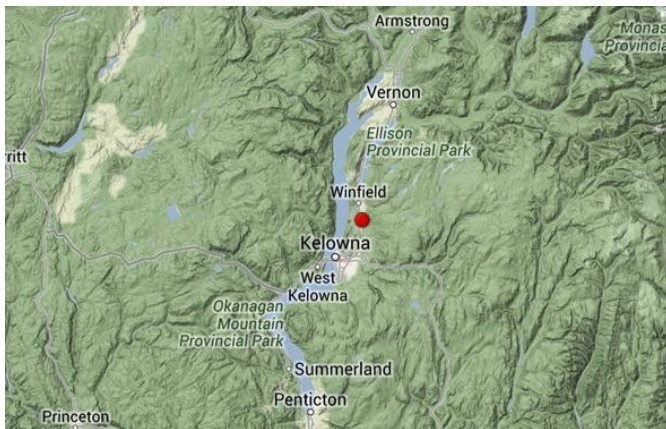
 Status: Red / Not Assessed ■

 Best Survey Time: Jun to Oct ■

 General Habitat: Foreshore ■

### RANGE

- Widespread across North America from British Columbia south to California and Florida (USA) and north to Quebec and Ontario; absent from central prairie regions
- In B.C., only known from one location at Ellison Lake north of Kelowna in central Okanagan Valley



**Figure 1** B.C. distribution of *L. dubia* var. *dubia* (BC CDC 2013)

### HABITAT

- Open muddy or sandy soil along receding river, lake or pond shorelines, apparently requiring warm water temperature and high mineral nutrient richness in the Ponderosa Pine Biogeoclimatic Zone
- Associates include hard-stemmed bulrush (*Schoenoplectus acutus*), red-rooted cyperus (*Cyperus erythrorhizos*), three-flowered waterwort (*Elatine rubella*), western yellow cress (*Rorippa curvisiliqua*), water smartweed (*Persicaria amphibia*), spikerushes (*Eleocharis* spp.), willows (*Salix* spp.) and common cattail (*Typha latifolia*)



**Figure 2** Open fine-textured substrate at Ellison Lake, B.C.



**Figure 3** Flooded lakeshore habitat at Ellison Lake, B.C.

### LIFE HISTORY

- Annual species that grows each year from seed, germinating following water drawdown, and blooming from June into October
- Mature capsules produced from July into October; as the capsules dry, they split open and release seeds
- Does not reproduce vegetatively so population survival depends on seeds and seed bank
- Seed dispersal is by water, waterfowl or small mammals
- May be subject to annual population fluctuations due to varying environmental conditions



**Figure 4** Illustration of *Lindernia dubia* (Douglas et al. 1999)

# *Lindernia dubia* var. *dubia* (continued)

## DESCRIPTION

### General

- Low-growing, rather delicate annual, up to 38 cm tall
- Multi-branched, smooth stems growing from a fine network of fibrous roots

### Leaves

- Leaves paired, lance-shaped or ovate, often slightly toothed and tapered to stems near base of plant
- Leaves usually 15 to 35 mm long

### Flowers

- Flowers found on thin, 3 to 28 mm long pedicels (stalks) that grow out from leaf bases and are about as long as their subtending leaves
- Petals from 6 to 10 mm long, and range from white to bluish to lavender (generally darker-coloured)
- Petals fused below, forming a floral tube, and lobed above into two lips (lower 3-lobed lip longer than upper 2-lobed lip), lower throat of floral tube with two hairy yellow ridges
- Sepals linear and pointed, from 4 to 6 mm long, as long or sometimes longer than the capsules

### Fruits

- Elliptical capsules, 4 to 6 mm long, each containing numerous tiny, pale yellow, finely net-veined seeds

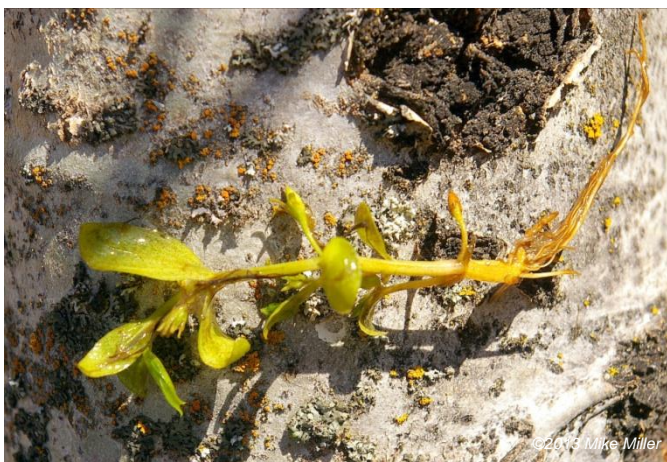


Figure 5 Plant showing fibrous roots and paired ovate leaves

## IDENTIFICATION TIPS

- Characterized by its delicate stature and somewhat showy, irregularly-lobed, white to bluish to lavender flowers held away from the stem on thin stalks
- False-pimpernel (*L. dubia* var. *anagallidea*) is a closely related species of similar habitats that is generally smaller (from 5 to 20 cm tall) with elliptic or ovate leaves that clasp the stems at their base, longer flower stalks that are usually much longer than their subtending leaves, smaller lighter-coloured flowers, sepals that are clearly shorter than capsules, and brownish yellow seeds



Figure 6 Close-up of plant showing leaves and calyx

## GENERAL THREATS AND GUIDANCE

- **Avoid development in areas with known occurrences of *Lindernia dubia* var. *dubia* through project relocation or redesign**
- Protect fine textured and sandy soil along receding river, lake and pond shorelines from disturbance and development and consider restoration including invasive plant removal following professional advice
- Maintain natural water level fluctuations with spring inundation and summer drawdown
- 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

- B.C. Conservation Data Centre. 2013. <http://a100.gov.bc.ca/pub/eswp/>
- Douglas et al. (editors). 1999. *Illustrated Flora of British Columbia*. Vol. 4. B.C. Min. Environ., Lands and Parks, and Min. For., Victoria, B.C.
- Klinkenberg, Brian (editor). 2013. E-Flora BC. [http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Lindernia dubia var. dubia&redblue=Both&lifeform=7](http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Lindernia+dubia+var.+dubia&redblue=Both&lifeform=7)
- NatureServe. 2012. <http://www.NatureServe.org/explorer>

## ACKNOWLEDGEMENTS

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