### Bitter-root (Lewisia rediviva)

Other names: Sand Rose, Desert Rose, Rock Rose, Spatlum, Spitlum, and Speetlum, Nla ? k'w epn.

# Background

Bitterroot is in the Purslane family (Portulacaceae). Lewis and Clark found the prepared roots to be too bitter for their taste, so they called it "bitterroot." When Lewis' pressed and dried specimen was examined months after picking, it still showed signs of life and upon planting, it grew – hence the scientific name *rediviva* meaning "restored to life" (Parish et al 1996).

### **Plant Morphology**

Bitterroot is a low, fleshy perennial, 1-3 cm tall. Flowers arise from a deep, thick, branched taproot with a short, woody base. Leaves are all basal and linear and are usually dried and withered by flowering time. Flowers are showy, deep pink to sometimes white on a short stalk close to the surface of the soil. They resemble the flowers of the water-lily and open only in the sun (Parish et al 1996).

## **Ecology**

In British Columbia, bitterroot occurs on dry, sandy or gravelly sagebrush plains and grassland slopes on lower elevations (Kuhnlein and Turner 1991). Figure1 shows the biogeoclimatic zones and subzones bitterroot can be found in the southern interior of BC (Province of BC – Ministry of Forests 1983).

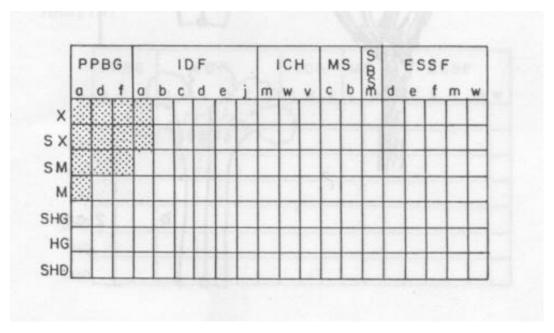


Figure 1. The dotted areas indicate where the plant has limited distribution and abundance.

### Food

The thick, fleshy roots of bitterroot were an important food source for Interior First Nations such as the Upper Nlaka'pamux, southern Secwepemc Okanagan, and Ktunaxa (Kuhnlein and Turner 1991). Other neighbouring nations obtained bitterroot through trade. At the turn of the century it was reported that ten bundles of bitterroot were equivalent in trade for one large, dressed buckskin (Ibid.). The roots are plentiful in mid May and best picked before the flower blooms otherwise the outer skin sticks to the root, is very hard to peel and becomes woody. The roots were dug using a digging stick made of saskatoon or similar hard wood. Once extracted, they were promptly peeled and the small red "heart" (the embryonic next season growth) was removed to reduce the bitter flavour (Kuhnlein and Turner 1991). Large quantities of the roots were dried but they were also steamed, boiled, pit-cooked and eaten fresh and almost always mixed with other foods such as Saskatoon berries (Ibid).

## Recipes

- 2 cups dried saskatoons
- 4 tbsp dried bitterroot

sugar to taste

Put in a pot and add water. Boil until the consistency of applesauce. Some people like to add flour as a thickener. Eat hot or cold.

(Courtesy of John McIntyre, Fraser Canyon Tribal Council)

Bitterroot can also be mixed with fish eggs, saskatoons and flour. Cook to a custard or pudding consistency. If eaten as a main meal, salt would be added; if eaten as a desert, sugar would be added.

(Courtesy of Joyce Sam and Laura Washington)

### Medicine

Kershaw reports that various First Nations prepared a bitterroot tea to treat heart trouble and pleurisy, to increase milk flow after childbirth and purify the blood and to relieve associated skin problems and diseases (2000).

## Warning

Dried bitterroot swells in the stomach, so it should be consumed in moderate quantities (Kershaw 2000).

### Note

Bitterroot is becoming increasingly hard to locate due to overgrazing, human development and invasion of exotic species. Do not add to the peril of this beautiful and delicate flower by harvesting this plant in areas where it is scarce. There are a few areas where it is plentiful, sampling it should not prove to be too harmful.

#### References

Kershaw, Linda. 2000. *Edible & Medicinal Plants of the Rockies*. Lone Pine Publishing: Edmonton. P 85.

Kuhnlein, Harriet and Nancy Turner. 1991. *Traditional Plant Foods of Canadian Indigenous Peoples*. Gordon and Breach Science Publishers: Philadelphia. P 228.

Parish, Roberta, Ray Coupe and Dennis Lloyd (eds). 1996. *Plants of Southern Interior British Columbia*. Lone Pine Publishing: Vancouver. P 71.

Province of BC – Ministry of Forests. 1983. *A Guide to Some Common Plants of the Southern Interior of British Columbia* – Land Management Handbook Number 7. Information Services Branch: Victoria. P 46.

Turner, Nancy J. 1997. *Food Plants of Interior First Peoples*. UBC Press: Vancouver. Pp 136-139.