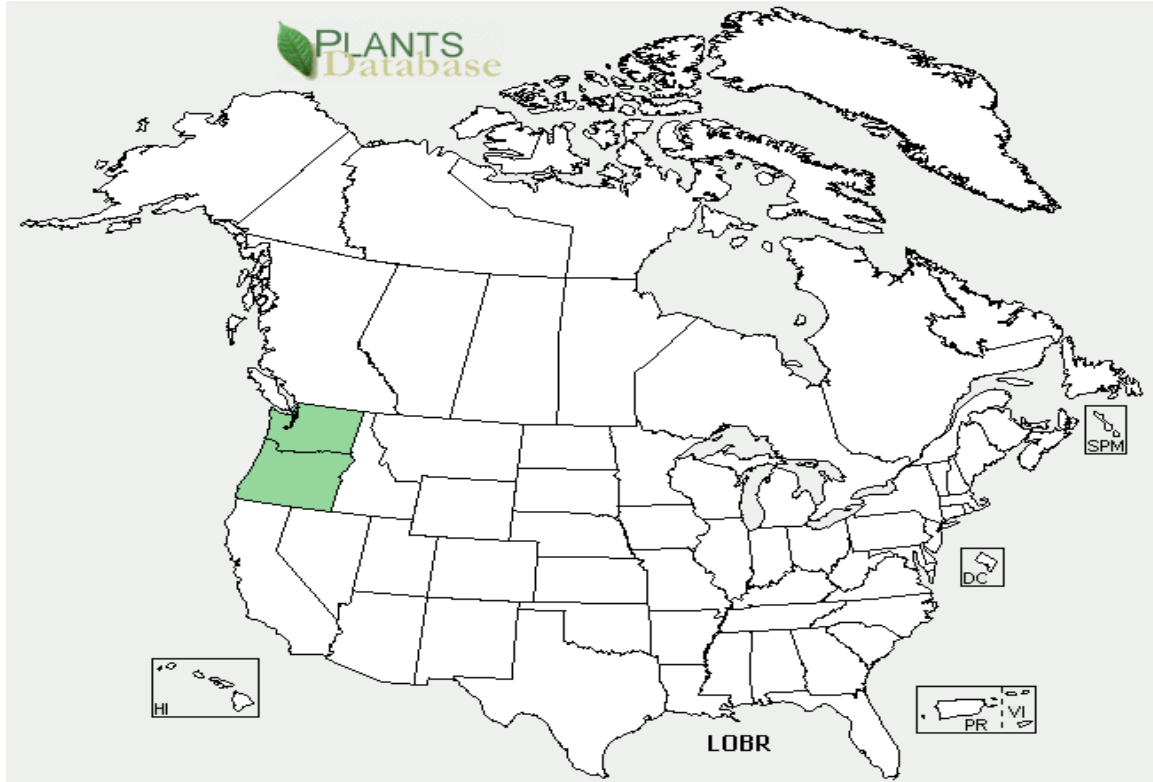


Lomatium bradshawii - Plant Propagation Protocol

ESRM 412 – Native Plant Production



[View Native Status](#)

Present Absent/Unreported

USA ([OR](#), [WA](#)) (3)



Photos by Melissa Carr. (8)

TAXONOMY

Plant Family

Scientific Name: Apiaceae
Common Name: Carrot family

Species Scientific Name

Scientific Name: <i>Lomatium bradshawii</i>
Varieties:
Common Name(s): Bradshaw's Lomatium, Bradshaw's Desert Parsley
Species Code: LOBR

GENERAL INFORMATION

Geographical range: Southwestern Washington, Puget Trough, Clark County (only 2 occurrences) Oregon: Central and Southern Willamette Valley: Benton, Lane, Linn, and Marion counties (47 occurrences) (1,7)
Ecological distribution: moist meadows, wetlands, seasonally wet prairies (1)
Climate and elevation range: Deep valleys, low elevations only (2)
Local habitat and abundance: Grows in wet prairies that are inundated until late spring or early summer, within 500 feet of river or stream beds, in deep pluvial clay, shallow, and poorly drained soils, sometimes over basalt layer. (2) Commonly associated with the following species: <i>Deschampsia cespitosa</i> , <i>Hordeum brachyantherum</i> , <i>Poa pratensis</i> , <i>Eryngium petiolatum</i> , <i>Perideridia</i> spp., <i>Juncus</i> spp., <i>Grindelia integrifolia</i> , <i>Microseris laciniata</i> , and <i>Galium cymosum</i> (1)
Plant strategy type / successional stage: grows best in seasonally flooded areas, between wetland and upland
Plant characteristics: perennial forb with long, slender taproot, linear segmented leaves 4-12 inches long, small, light yellow flowers on umbels (2); flowers have spatial and temporal separation of sexual phases to insure outcrossing (not self-pollinating) (6), fruit is oblong, ¼-1/2 inch w/ thickened, corky wings (7). Blooms late April-June, fruits mid-May-early July (8).

PROPAGATION DETAILS

Ecotype: n/a
Propagation Goal: Seedlings (2).
Propagation Method: Seed only, plant germinated seeds in pots, or direct seed at site (LOBR does not reproduce vegetatively) (7).
Product Type: seeds, seedlings in 5" or 9" pots (2).
Time to Grow: 60 days
Target Specifications: seedlings with 1-5 leaves, 1-3 inflorescences (3).
Propagule Collection Instructions: Collect mature seeds in wild from late June-July. (2)
Propagule Processing/Propagule Characteristics: Clean seeds can be stored up to 13 years, but fresher seed has higher germination rates (2).
Pre-Planting Propagule Treatments: 8-11 weeks of cold stratification alternating between 59 F/77 F or 68 F/86 F in vermiculite in sealed plastic bags (2,7).
Growing Area Preparation / Annual Practices for Perennial Crops: Direct seeding is effective, especially in cleared area, especially in a burned site (5). Seedlings planted in 5 or 9 inch pots in a mix of one part peat, one part loam and two parts pumice.
Establishment Phase Details: water daily until seedlings establish a strong taproot and 1-3 leaves (2).
Length of Establishment Phase: 60 days (2).
Active Growth Phase: germination to dormancy (2).
Length of Active Growth Phase: 4 months (2).
Hardening Phase: n/a
Length of Hardening Phase: n/a
Harvesting, Storage and Shipping: seedlings can grow in greenhouse over summer for fall planting (2).
Length of Storage: 6-7 months to 13 years (2).
Guidelines for Outplanting / Performance on Typical Sites: direct seeding highly effective (17-38%) (2), especially in burned sites (5), addition of fertilizer has little to no effect until 3 rd year of growth (2). High survival rates of seedlings grown over summer in greenhouse and out planted in fall with 17-17-17 slow release fertilizer (3).. Outplanting of seedlings done late spring during partial wetland inundation (2).
Other Comments: LOBR is a threatened, endangered, and imperiled species in Washington and Oregon, so seed collection is limited (1).

INFORMATION SOURCES

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