

**Species**

*Gymnocarpium dryopteris*

Oak Fern

**Range**

Circumboreal, Alaska to Newfoundland, south to Oregon, northern Idaho, NW Montana, Saskatchewan, Manitoba, Minnesota, Iowa, Wisconsin, Michigan, Ohio, West Virginia, and Maryland

**Climate, elevation**

Moist forests, streambanks, and wet cliffs from lowland to mid-montane elevations

883m- 5860m

**Local occurrence**

Very abundant in the understory of coniferous forests throughout the Pacific Northwest

**Habitat preferences**

Moist to wet heavily shaded forests, rocky slopes

**Plant strategy type/successional stage (stress-tolerator, competitor, weedy/colonizer, seral, late successional)**

Facultative Seral Species

**Associated species**

Alaska cedar (*Chamaecyparis nootkatensis*), noble fir (*Abies procera*), lodgepole pine (*Pinus contorta*), Alaska blueberry (*Vaccinium alaskensis*), red huckleberry (*V. parviflorum*), thimbleberry (*Rubus parviflorus*), salmonberry (*R. spectabilis*), devil's club (*Oplopanax horridus*), menziesia (*Menziesia ferruginea*), salal (*Gaultheria shallon*), Oregon oxalis (*Oxalis oregana*), bunchberry (*Cornus canadensis*), false lily-of-the-valley (*Maianthemum dilatatum*), twisted stalk (*Streptopus* spp.), threeleaf foamflower (*Tiarella trifoliata*), woodnymph (*Moneses uniflora*), pioneer violet (*Viola glabrella*), western swordfern (*Polystichum munitum*), ladyfern (*Athyrium filix-femina*), bracken fern (*Pteridium aquilinum*), woodfern (*Dryopteris* spp.), stiff clubmoss (*Lycopodium annotinum*)

**May be collected as:**

Spores, Division

**Collection restrictions or guidelines**

Spore: Place spore surface down on butcher paper to collect spores. Spores will appear as a fine dust on the paper after several days of drying.

Collect spores when mature, usually from July to late August from the surface of paper and surface sow in sterilized flats filled with sterile, finely milled peat moss

Division: Can be divided in spring if the rhizome is large and the roots are well developed.

**Seed germination**

No dormancy breaking required

**Seed life**

Spore viability highly variable, usually low after 1 year

**Recommended seed storage conditions**

Store spores in glassine envelopes or in packets or waxed paper. Store packets at 1-4 C, in moisture-tight and air tight containers.

**Propagation recommendations**

Divisions: Divisions of rhizomes can be done in early spring with at least 1 leaf shoot or bud per rhizome section and transplanted into containers

**Soil or medium requirements**

Moist mildly acidic

**Installation form**

Division has the highest potential for success

**Recommended planting density**

About every 2ft

**Care requirements after installed**

Average water requirements

**Normal rate of growth or spread; lifespan**

Fast growing/ spreading Deciduous perennial

**Sources cited**

1. <http://www.rook.org/earl/bwca/nature/ferns/gymnodry.html>
2. E-Folra BC. <http://linnet.geog.ubc.ca/Atlas/Atlas.aspx?sciname=Gymnocarpium+dryopteris>
3. Native Plant Nursery, Glacier National Park. [http://nativeplants.for.uidaho.edu/network/view.asp?protocol\\_id=91](http://nativeplants.for.uidaho.edu/network/view.asp?protocol_id=91)

**Data compiled by**

Kelly Sutton 5/23/06