

Plant Data Sheet

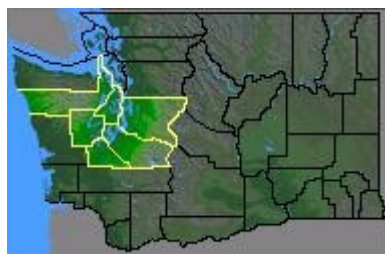


Species : Giant Chain Fern, Woodwardia Fimbriata



Range: Arizona, British Columbia, California, Nevada, Oregon, Washington. (6, 7)

Climate, elevation: USDA zones: 8-9. Elevation from 3ft to 287ft (1to 87 m) (6).



Local occurrence: It's local occurrence is in the counties of Jefferson, Mason, Kitsap, Thurston, Pierce, and King County. (2) It is in the threatened and endangered species and it is classified as a sensitive species by the Washington State Plant list.(7)

Habitat preferences: *Woodwardia* does well in woodlands or next to streams, moist bogs, springs or ponds and even containers. This fern grows in partial shade, but it can grow in full sun if extra moisture is given during summer. *Woodwardia* is not very frost tolerant so grow in a woodland or protected area (6)

Plant strategy type/successional stage : It is not aggressive in its colonization & usually only a few are encountered at a time. It does not compete well with native swordfern (*Polystichum munitum*) which is more forgiving of imperfect conditions, & it is easily displaced by the many invasive species of weeds. It also

vanishes out of eroded or deforested areas.(5)

Associated species: From the family Blechnaceae. Genus: Woodwardia. Species: Frimbriata (6,3)

May be collected as: Ferns don't have seed. They have spores. Collect spores in the summer or division in the spring.

Collection restrictions or guidelines: In my opinion, and since is listed as a sensitive plant in the endanger species list, it should be collected only by spores. But if a friend has one, then it can be collected by division.

Seed germination: It doesn't need dormancy breaking. Spores germinate in about two to three weeks if they are sown in the right medium. (4)

Seed life: N/A

Recommended seed storage conditions: N/A

Propagation recommendations: By division: Cut the rhizome, which it has a crown or clump. Separate the clump with a knife into 5 in. clumps. Plant the new clump of ferns in the same kind of soil and light/shade conditions in which it was previously growing with the rhizome just below the surface of the soil. (4)

By spores: The spores can be seen arranged in clusters called sori on the underneath side of the leafy fronds. The spores should be black when ripen. Tie a clear plastic bag over a large healthy frond and shake or tap the frond until the spores fall into the bag. **Planting the spores:** Any sterile flat container may be used for propagating ferns, for example: salad, pastries and pies containers. To sterilize them: Mix 1 part bleach to 9 parts water and wash the container to be used. After the container has dried, fill it with a planting medium. Use a mixture of about 1/2 peat moss and 1/2 perlite or vermiculite which is a very good medium for propagating ferns. It is important to keep the planting medium damp and covered with clear plastic or glass. Put the container in a dark location for a day or two. The disadvantage is that it will take at least two years to have these ferns grow to a medium size and longer to reach a mature size.(4)

Soil or medium requirements: Moist, rich loamy soil.(6,5)

Installation form: It can be purchase through nurseries in 1 gallon containers. The cost range from 12.00-15.00 dollars (1)

Recommended planting density: It depends on the size of the clump. It ranges from 4ft-6ft, 6ft-8ft, 8ft-10ft, and 10ft-12ft.(5,3)

Care requirements after installed: The previous year's fronds on a chain fern last until the new year's fronds are unfurling. It may need some early or mid-spring trimming to tidy it up, removing the older worn-out fronds. Do not let it dry while it is establishing itself. (5)

Normal rate of growth or spread; lifespan: It is a perennial fern with a mature size of 6 feet (2 m) height and a width of 3-9 feet (1-3 m). It will multiply itself by runners in a very slow pace. It is the only North American Woodwardia that is evergreen. (6,5)

Sources cited

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