Washington Flora Checklist

A checklist of the Vascular Plants of Washington State Hosted by the University of Washington Herbarium

Family: Cystopteridaceae

4 terminal taxa (species, subspecies, and varieties).

The Washington Flora Checklist aims to be a complete list of the native and naturalized vascular plants of Washington State, with current classifications, nomenclature and synonymy.

Taxa included in the checklist:

- Native taxa whether extant, extirpated, or extinct.
- · Exotic taxa that are naturalized, escaped from cultivation, or persisting wild.
- Waifs (e.g., ballast plants, escaped crop plants) and other scarcely collected exotics.
- Interspecific hybrids that are frequent or self-maintaining.
- Some unnamed taxa in the process of being described.

Family classifications follow <u>APG IV</u> for angiosperms, PPG I (J. Syst. Evol. 54:563-603. 2016.) for pteridophytes, and Christenhusz et al. (Phytotaxa 19:55-70. 2011.) for gymnosperms, with a few exceptions. Nomenclature and synonymy at the rank of genus and below follows the <u>2nd Edition of the Flora of the Pacific Northwest</u> except where superceded by new information.

Accepted names are indicated with blue type, synonyms with gray type. Native species and infraspecies are marked with **bold-face type**. *Non-native and introduced taxa are preceded by an asterisk.

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Please note: This is a working checklist, continuously updated. Use it at your discretion.

Created from the Washington Flora Checklist database on July 12th, 2025 at 8:02am PT. Available online at https://burkeherbarium.org/waflora/

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Ferns and Lycophytes:

Cystopteridaceae [HC2] Fragile Fern Family

Cystopteris [FNA2, HC, HC2]

Neues J. Bot. 1(2): 26. 1806. bladder-fern

Cystopteris fragilis (L.) Bernh. [FNA2, HC, HC2]

Neues J. Bot. 1(2): 26, plate 2, fig. 9. 1806. bladder fern, brittle fern, fragile fern

Cystopteris dickieana Sim Polypodium fragile L.

FNA2: "Especially in the western portion of its North American range (British Columbia, Washington, Montana, Idaho, Oregon, California), Cystopteris fragilis appears to be developing morphologically and ecologically distinctive variants. Hybrid individuals with aborted spores have been discovered, and plants from these areas increasingly tend to grow on both soil and rock and to have slightly different morphologies on the two substrates. These variants intergrade, however, and are not sufficiently distinct to warrant species status. This polymorphic polyploid is probably actively speciating at the tetraploid level, perhaps through gene silencing (C. R. Werth and M. D. Windham 1991)."

Gymnocarpium [FNA2, HC, HC2]

Phytologist. 4: 371. 1851. oak-fern

Gymnocarpium xbrittonianum (Sarvela) Pryer & Haufler [HC2]

Syst. Bot. 18(1): 168. 1993. hybrid oak fern

Gymnocarpium disjunctum (Rupr.) Ching [FNA2, HC2]

Acta Phytotax. Sin. 10: 304. 1965. Pacific oak-fern, western oak-fern

Dryopteris disjuncta (Rupr.) C.V. Morton

Gymnocarpium dryopteris (L.) Newman ssp. disjunctum (Rupr.) Sarvela

Gymnocarpium dryopteris (L.) Newman var. disjunctum (Rupr.) Ching [VPPNW1]

Polypodium dryopteris L. var. disjunctum Rupr.

Gymnocarpium dryopteris (L.) Newman [FNA2, HC, HC2]

Phytologist. 4: app. 24. 1851. northern oak fern

Dryopteris linnaeana C. Chr. [Abrams, Peck]

Lastrea dryopteris (L.) Bory

Phegopteris dryopteris (L.) Fée

Polypodium dryopteris L.

Thelypteris dryopteris (L.) Slosson

FNA2: "Gymnocarpium dryopteris is a fertile allotetraploid species that arose following hybridization between G . appalachianum and G . disjunctum (see reticulogram). Its wide distribution over much of the north temperate zone has provided ample opportunity for secondary contact between G . dryopteris and each of its diploid parents, thereby resulting in a wide-ranging composite of abortive-spored triploid crosses (G . disjunctum $\times G$. dryopteris and G . appalachianum $\times G$. dryopteris). These relationships are shown on the diagram. Sterile triploid plants are not restricted only to areas where the range of the tetraploid overlaps with that of either diploid. Their broad distribution could be explained in part by their spores, which are of two types: malformed, black, and with very exaggerated perispores, or round with extensive netted perispores (K. M. Pryer and D. M. Britton 1983). The latter spore type is capable of germination and presumably permits the plants to reproduce apogamously. The name G . \times brittonianum (Sarvela) Pryer &

Haufler has been applied to the G . disjunctum \times G . dryopteris hybrid formula (K. M. Pryer and C. H. Haufler 1993). The type of G . \times brittonianum has aborted and round spores, and leaves that strongly resemble those of G . disjunctum . They are large, 3-pinnate-pinnatifid, and the second and third pairs of pinnae are sessile with basal basiscopic pinnules markedly longer than the basal acroscopic pinnules. Sterile triploid plants with a morphology similar to the type of G . \times brittonianum are frequent. The biology of both of these cryptic hybrid taxa needs further study, which should lead to detailed morphologic descriptions and distribution maps. Gymnocarpium dryopteris also hybridizes with both G . jessoense subsp. parvulum and G . robertianum ."