# **Washington Flora Checklist**

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

### Family: Isoetaceae

8 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 except where superceded by new information.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.

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

Created from the Washington Flora Checklist database on August 30th, 2025 at 8:16pm PT. Available online at <a href="https://burkeherbarium.org/waflora/">https://burkeherbarium.org/waflora/</a>

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## Ferns and Lycophytes:

### Isoetaceae [FNA2, HC, HC2] Quillwort Family

#### Isoetes [FNA2, HC, HC2]

Sp. Pl. 2: 1100. 1753; Gen. Pl. ed. 5, 486, 1754. quillwort

#### Isoetes bolanderi Engelm. [FNA2, HC, HC2]

Amer. Naturalist. 8: 214. 1874. Bolander's quillwort

Isoetes bolanderi Engelm. var. parryi Engelm. Isoetes bolanderi Engelm. var. pygmaea (Engelm.) Clute [Abrams] Isoetes californica Engelm. Isoetes pygmaea Engelm.

FNA2: "Small plants with leaves less than 2.5 cm have been called Isoetes bolanderi var. pygmaea (Engelmann) Clute. Isoetes bolanderi hybridizes with I. echinospora and I. occidentalis."

#### Isoetes howellii Engelm. [FNA2, HC, HC2]

Trans. Acad. Sci. St. Louis. 4: 385. 1882. Howell's quillwort

Isoetes melanopoda Gay & Durieu var. californica A.A. Eaton Isoetes nuda Engelm. Isoetes underwoodii L.F. Hend.

FNA2: "In many respects, Isoetes howellii appears similar to I. melanopoda. Small plants with leaves less than 10 cm and megaspores less than 420 ?m diam. have been called I. howellii var. minima (A. A. Eaton) N. E. Pfeiffer."

#### Isoetes maritima Underw. [FNA2, HC2]

Bot. Gaz. 13: 94. 1888. maritime quillwort

Isoetes beringgensis Kom. Isoetes echinospora Durieu var. maritima (Underw.) A.A. Eaton Isoetes macounii A.A. Eaton

FNA2: "Isoetes maritima hybridizes with I. echinospora and I. occidentalis [ = I. truncata (A. A. Eaton) Clute]."

#### Isoetes minima A.A. Eaton [HC2]

Fern Bulletin 6: 30. 1898.

midget quillwort

Isoetes howellii Engelm. var. minima (A.A. Eaton) N. Pfeiff.

BEN 304: "Several field characters distinguish plants of I. minima from plant of I. nuttallii. First, I. minima has an incomplete velum covering up to 75% of the sporangium whereas, I. nuttallii has a complete velum covering 100% of the sporangium. Second, I. minima has spinulose textured megaspores ranging 290-350 mm in diameter. In contrast, I. nuttallii has smooth to tuberculate textured megaspores ranging 360-600 mm in diameter. Third, I. minima is generally a smaller plant with leaves up to only 4 cm long whereas, I. nuttallii is usually larger plant with leaves up to 20 cm long."

#### Isoetes nuttallii A. Br. [FNA2, HC, HC2]

Amer. Naturalist. 8: 215. 1874. Nuttall's quillwort

Isoetes suksdorfii Baker

Isoetes occidentalis L.F. Hend. [FNA2, HC2] Bull. Torrey Bot. Club. 27: 358. 1900.

#### western quillwort

Isoetes flettii (A.A. Eaton) N.E. Pfeiff. [Abrams] Isoetes lacustris L. [FNA2, HC], misapplied Isoetes lacustris L. var. paupercula Engelm. Isoetes paupercula (Engelm.) A.A. Eaton Isoetes piperi A.A. Eaton [Abrams]

FNA2: "Megaspores of Isoetes occidentalis are variable in wall pattern. Populations exist with rugulate or tuberculate megaspores and other population with cristate to echinate megaspores. Plants with thin-walled megaspores that crack easily have been called I. paupercula. Populations in which megaspores have short ridges and tubercles in a band along the equator have been called I. flettii. Populations with broad-based tubercles on the megaspores have been called I. piperi. The variation in megaspore pattern may indicate multiple allopolyploid origins for I. occidentalis. The general aspect of Isoetes occidentalis and its tough, dark green leaves suggested to early workers an affinity with I. lacustris. Isoetes occidentalis hybridizes with I. bolanderi, I. echinospora, and I. maritima [ = I. x truncata (A. A. Eaton) Clute]."

#### Isoetes tenella Léman [HC2]

Mém. Soc. Linn. Paris 6: 179. 1827. bristle-like quillwort, spiny spored quillwort

Isoetes braunii Durieu [Abrams] Isoetes echinospora Durieu [FNA2, HC] Isoetes echinospora Durieu var. braunii (Durieu) Engelm. Isoetes echinospora Durieu var. muricata (Durieu) Engelm. Isoetes muricata Durieu Isoetes setacea Lam. [VPPNW1]

FNA2: "North American plants of Isoetes echinospora, which bear stomata, have been called I. muricata or I. echinospora var. braunii to distinguish them from European plants of I. echinospora, which do not have stomata. Isoetes echinospora is a distinct species but has considerable variation, especially in size, color, and form of leaves. It is the most commonly encountered quillwort in oligotrophic, noncalcareous lakes and ponds of northeastern North America. Isoetes echinospora hybridizes with I. bolanderi; I. engelmannii [ = I. x eatonii Dodge (later synonym = I. x gravesii A. A. Eaton)]; I. lacustris [ = I. x hickeyi Taylor & Luebke]; I. maritima; I. riparia [ = I. x dodgei A. A. Eaton]; and I. tuckermanii."

#### Isoetes ×truncata (A.A. Eaton) Clute

(= Isoetes maritima × Isoetes occidentalis)

Isoetes maritima Underw. × Isoetes occidentalis Hend.