

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 [APG IV](#) 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synonymy at the rank of genus and below follows the [2nd Edition of the Flora of the Pacific Northwest](#) except where superseded by new information.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 April 1st, 2025 at 11:50am PT.
Available online at <https://burkeherbarium.org/waflora/>

Comments and questions should be addressed to the checklist administrators:

David Giblin (dgiblin@uw.edu)

Peter Zika (zikap941@gmail.com)

Suggested citation:

Weinmann, F., P.F. Zika, D.E. Giblin, B. Legler. 2002+. Checklist of the Vascular Plants of Washington State. University of Washington Herbarium. <https://burkeherbarium.org/waflora/>. Accessed Apr 1, 2025.

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 μ 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 beringensis 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 μ m in diameter. In contrast, *I. nuttallii* has smooth to tuberculate textured megaspores ranging 360-600 μ m 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 x truncata* (A.A. Eaton) Clute**

(= *Isoetes maritima* x *Isoetes occidentalis*)

Isoetes maritima Underw. x *Isoetes occidentalis* Hend.