

# 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synonymy at the rank of genus and below follows the [2nd Edition of the Flora of the Pacific Northwest](#) except where superceded by new information.

Accepted names are indicated with blue font; synonyms with black font.  
Native species and infraspecies are marked with **boldface** font.

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

Created from the Washington Flora Checklist Database on November 21st, 2024 at 5:24am PST.  
Available online at <https://burkeherbarium.org/waflora/>

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# Ferns and Lycophytes:

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

**Synonyms:** (none)

**References:** (none)

### *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.  
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.  
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  $\mu$ m diam. have been called *I. howellii* var. *minima* (A. A. Eaton) N. E. Pfeiffer."

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

Bot. Gaz. 13: 94.  
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.  
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  $\mu$ m in diameter. In contrast, *I. nuttallii* has smooth to tuberculate textured megaspores ranging 360-600  $\mu$ 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.  
Nuttall's quillwort

*Isoetes suksdorfii* Baker

***Isoetes occidentalis* L.F. Hend. [FNA2, HC2]**

Bull. Torrey Bot. Club. 27: 358.  
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.

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.