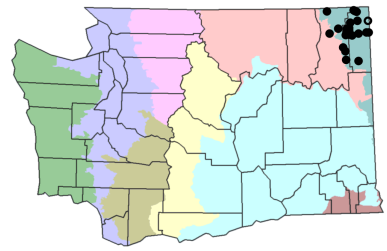
Dryopteris cristata (L.) A. Gray

crested shield-fern

Dryopteridaceae - wood fern family

status: State Sensitive, BLM sensitive, USFS sensitive

rank: G5 / S2



General Description: Adapted from Flora of North America (1993+): Perennial fern with leaves clustered on a short rhizome. Leaves 35-70 x 8-12 cm, with both fertile and sterile forms. Fertile leaves larger, erect, dying back in winter; sterile leaves several, smaller, green through winter, spreading, forming a rosette. Petiole 1/4-1/3 the length of the leaf, scaly at least at the base, scales tan, scattered. Blade green, narrowly lanceolate or with parallel sides, pinnate-pinnatifid, not glandular. Pinnae of fertile leaves triangular, twisted to nearly perpendicular to the plane of the blade. Basal pinnules longer than adjacent pinnules. Pinnule margins with spiny teeth toward tip.

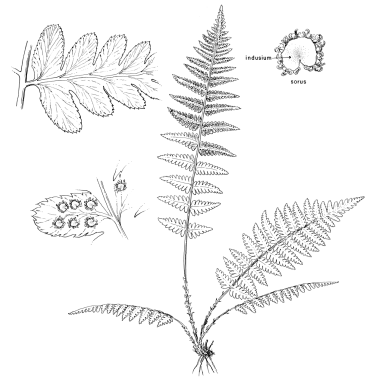


Illustration by Jeanne R. Janish, ©1969 University of Washington Press

Reproductive Characteristics: Sori round, in 1 row, located midway between the midvein and margin of pinnules. Indusia lacking glands, round to kidney-shaped. Fertile June to September.

Identification Tips: *D. arguta* has glandular leaf blades that persist through the winter; the pinnules are finely spiny with spreading teeth. *D. filix-mas* leaves all die back in winter; they are 28-120 cm long, with petioles less than 1/4 the length of the leaves, and scales of 2 types (broad and hairlike). Identification may be complicated by the frequent presence of hybrids in the field.

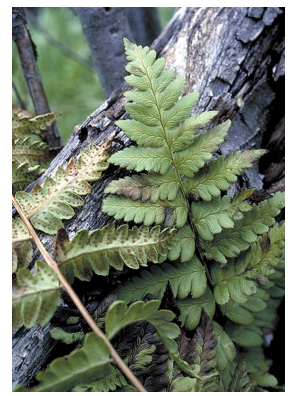


photo by Barb Benner

Range: Europe, southern Canada, WA, northern ID, northwest MT, ND, NE, MN south through MO, and much of the eastern U.S.

Habitat/Ecology: Wet meadows, cedar/spruce forested wetlands, open shrubby wetlands, ponds, and stream edges. Plants in wetlands are often slightly raised above the water surface on hummocks or downed woody debris. Soils are generally very high in organic matter. Elevations in WA: 550-1250 m (1800-4100 ft). Beaver activity is high at some sites and probably has played an important role in the formation of the species' wetland habitat. This plant is palatable to both cattle and deer.

Comments: This taxon is rare in several states and Canadian provinces. Threats include grazing, timber harvesting, hydrologic change, recreation, and competition with nonnative plants such as reed canarygrass (*Phalaris arundinacea*).

photo by Barb Benner

References: Flora of North America 1993+, vol. 2; Lellinger 1985.