

***Schistostega pennata* (Hedw.) Web. & Mohr**

Status: State Working List

Rank: S2G3G4

General Description: *Schistostega pennata* forms tiny erect fern-like bluish-gray-green leafy shoots 4-7 mm tall. Leaves of sterile shoots are 0.5-1.2 mm long, acute, alternately arranged forming a flattened frondiform shape. The shoots often occur in clusters. The protonemal mat is composed of filamentous strands of tiny clear spherical cells that reflect light to give off a greenish-golden color. The plants are not contorted when dry. Sporophytes are common, light brown, with 0.4 - 0.5 mm, globose urns occurring on top of an erect, 1.5- 4.0 mm tall seta. A peristome is lacking.

Identification Tips: *Schistostega pennata* can be readily distinguished from several similar species. *Fissidens bryoides* is unique in that the two sides of the leaf blade are folded together to form a pocket (vaginant laminae). These leaves are also bordered with linear marginal cells and the capsule has reddish peristome teeth. *Epipterygium tozeri* and the several species of *Pohlia* have larger leaves and they are not flattened in appearance.

Range: This species is known throughout the Pacific Northwest but becomes rarer as you go south into Oregon. In Washington it is reported from Grays Harbor, Jefferson, King, Kittitas, Okanogan, Pierce, Skamania, Snohomish, Whatcom and Yakima counties.

Habitat: *Schistostega pennata* occurs on the fine textured mineral soil in shaded pockets of overturned tree roots, often adjacent to shallow pools of standing water at the base of the root wad. It also grows attached to rock or mineral soil around the entrance to caves, old cellars and animal burrows.

State Status Comments: Until recently, this species was known from only seven counties in western Washington. Recent surveys have extend its range into Okanogan, Kittitas, and Yakima counties.

Inventory Needs: Appropriate habitats throughout Washington should be inventoried.

Threats and Management Concerns: *Schistostega pennata* is currently considered a Survey and Manage Category A species under the Northwest Forest Plan (USDA/USDI 2001). This classification carries the need to manage known sites and survey prior to habitat disturbing activities on USDA Forest Service and USDI Bureau of Land Management lands. Threats to this species include logging, removal of fallen tree root wads and recreational use of caves. In Oregon *S. pennata* is also listed as an S2 (imperiled because of rarity or because other factors make it very vulnerable to extinction).

Schistostegia pennata (Hedw.) Web. & Mohr

References:

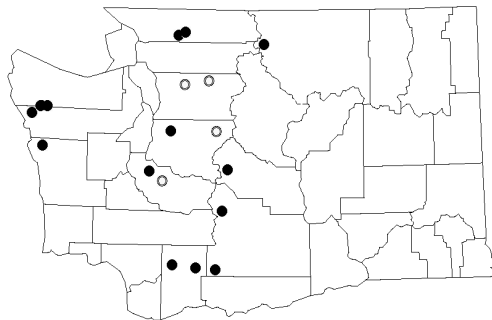
Crum, H.A., L.E. Anderson. 1981. *Mosses of Eastern North America, 2 volumes*. Columbia University Press. New York. 1328 pp.

Lawton, E., 1971. *Moss Flora of the Pacific Northwest*. The Hattori Botanical Laboratory. Nichinan, Miyazaki, Japan. 362 pp.

USDA Forest Service and USDI Bureau of Land Management. 2001. Record of Decision and Standards and Guidelines for Amendments to the Survey and Manage, Protection Buffer, and other Mitigation Measures Standards and Guidelines. 147 pp. USDA Forest Service, Portland, OR.



Known distribution of *Schistostegia pennata* in Washington



● Current (1980+)

○ Historic (older than 1980)

2003 Produced as part of a cooperative project between the Washington Department of Natural Resources, Washington Natural Heritage Program, and the U.S.D.A., Forest Service, Olympic National Forest. The author of these fact sheets is Judy Harpel, Region 6, USFS. Persons needing this information in an alternate format may call (360) 902-1340 or TTY (360) 902-1125.