

VNPS Piedmont Chapter WILDFLOWER of the WEEK

WILDFLOWER #89 answer: CHRISTMAS FERN (*Polystichum acrostichoides*)

Why name a fern for Christmas? This evergreen fern brightens the forest floor when little else is growing. European settlers in the American wilderness used the dark leathery leaves in holiday decorations. At the base of each pinna (leaflet) with its bristle-tipped teeth is a projection. Some see it as shaped like the toe of a stocking, others say the heel. In either case, turn the frond sideways and you can envision a row of Christmas stockings at the hearth.

Christmas fern comes bearing gifts: the Cherokee and Iroquois once used it to treat rheumatism, pneumonia, and toothache. It forms a significant part of the diet of ruffed grouse in fall and winter. Turkeys eat the fiddleheads, and in the spring ovenbirds and veery conceal their nests on the ground among the overwintered fronds.

These fronds are of two kinds. Short sterile fronds lie down on the earth, open to sunlight, nourishing the plant year round. Lying close to the ground protects them from winter water loss. They encircle tall, erect fertile fronds, on whose upper third the pinnae suddenly get narrow. Turn over those narrow pinnae to see round sori (clusters of spore-making sporangia). The sori are in neat lines, giving rise to the name *Polystichum*, or “many rows.” Each one is covered with a circle of tissue tacked down in the center, a design called peltate; this is why Christmas fern is a “shield fern.”

Colors help you know Christmas fern. Sporangia spill from under their covers until they carpet the back of the fertile pinnae in golden brown. Look also for dense brown scales along the upright rhizome and the stem. When spring comes, new fiddleheads will unroll, gleaming in silver scales.

WILDFLOWER #90

Clues: This little tree has dull green spiky leaves.



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