

VNPS Piedmont Chapter WILDFLOWER of the WEEK

WILDFLOWER #23 Answer: CUT-LEAF GRAPE FERN (*Sceptridium dissectum*)

This fern has unusual timing, even for its own genus. It dies back in May, when other ferns are flourishing. In July one new leaf rises on a fleshy stem, green tinged with a little red. It will last all winter, turning bronzy purple. Lacy or plain-edged, this sterile leaf lies near horizontal. A fertile frond, if there is one, diverges near ground level, standing upright like a scepter.

Ferns have two alternate life forms. With luck, a spore will grow into a tiny heart-shaped green prothallus, which makes eggs and sperm. Swimming on a thin film of water, sperm joins a neighbor's egg to create the familiar leafy spore-bearing plant.

Grape ferns give this story a distinct twist. The prothallus develops underground, in darkness, minus chlorophyll. It is entirely fed by fungi for as long as five years. Even after a plant matures above ground, with fleshy roots of its own, fungi still help feed it. Maybe this is why a cut-leaf grape fern lives up to 45 years, even if deer, ruffed grouse, or turkeys eat the leaves in a hard winter.

WILDFLOWER #24

Clues: This super-strong member of the daisy family holds its clusters of brilliant magenta or purple flowers as much as ten feet high.

