## VNPS Piedmont Chapter WILDFLOWER of the WEEK

## WILDFLOWER #94 answer: SHINING CLUB MOSS (Huperzia lucidula)

Shining clubmoss is not a moss but a "fern ally." Clubmosses are also (somewhat fancifully) called lycopods, meaning "wolf foot." Lycopods were around way before dinosaurs. Huge ones, the size of trees, grew and fell in swamps and were compressed over hundreds of millions of years, becoming coal. They share a common ancestor with other vascular plants, but split off long before flowering plants. Clubmosses today are much smaller and more diverse than their giant ancestors.

Like ferns, clubmosses have a spore-making stage with paired chromosomes, and a sexual stage with single chromosomes. You see the spore-making stage, or sporophyte. Spores grow in yellow sacs, like kernels of corn, at the base of certain leaves. The sacs split in late summer; you can see pale remnants in the narrow areas that mark past growing seasons.

The spores become tiny plants you can barely see. They make sperm and eggs, but no food. They are fed by fungi and perhaps by their sporophyte neighbors.

Late in fall, the plant reproduces a second way. At the tip, it grows pseudowhorls of gemmae, claw-shaped little clusters of three leaves. A gemma can fall off and root as a new plant. In case this isn't insurance enough, clonal colonies can arise from sprawling stems.

Humans have used clubmosses since ancient times. The spores repel water, so they have become baby powder, photographers' flash powder, and coating for pills. Spores and plants served as mordants to lock in dye. You might burn ancient clubmosses to light or heat your home.

## **WILDFLOWER #95**

Clues: In winter woods, look for a solitary leaf with a purple underside.





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