

VNPS Piedmont Chapter WILDFLOWER of the WEEK

WILDFLOWER #68 answer: SOUTHERN SLENDER LADIES' TRESSES (*Spiranthes gracilis*)

A lovely surprise amid coarser meadow plants, this native orchid graces old fields as well as woodlands, and even lawns that are not mowed too assiduously. Its full formal name is *Spiranthes lacera* subsp. *gracilis*. The genus name proclaims the signature “spiral of flowers.” “Tresses” evokes hair twined into braids, though an older name is “traces,” for the zigzag laces tying a corset.

Unlike its sister, *S. lacera* subsp. *lacera*, or northern ladies' tresses, this orchid has densely crowded flowers, a smooth stem, and no leaves when it blooms; the basal leaves have already withered. There are a lot of other species of ladies' tresses, but *gracilis* is unmistakable. Look for a glowing green spot on the labellum—the pouting lowest petal.

Flowers open from bottom to top, helping to ensure cross-pollination. Long-tongued bees, the chief pollinators, might have to turn upside down in the flower to get at the pollinium, or bundle of pollen. Stuck to the bee's body, it is carried to another flower whose stigma, exposed and sticky, grabs it.

Like most orchids, ladies' tresses produces thousands of microscopic seeds, only a few cells each. The seed coat is a sort of balloon, one cell thick, that lets seeds float through the air, locally or in the stratosphere. In an airplane, you might fly through a cloud of orchid seeds.

Orchid seeds travel light because unlike seeds of other plants, they store no food. For the embryo to germinate, mycorrhizae must colonize the seed. They go on passing nutrients through the few fleshy roots for at least three years before the orchid flowers and for the rest of its life—a good reason to leave orchids where you find them.

WILDFLOWER #69

Clues: Gay yellow flowers give way to fat black pods.

