

Special Orchids of the Florida Big Bend

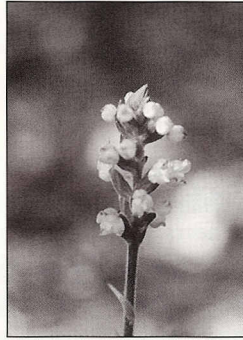
by Angus K. Gholson Jr., W. Wilson Baker, and Gil Nelson

The central counties of the Florida Panhandle have long been known as areas rich in flora and botanically important, with an array of unique and restricted plants. From the numerous insectivorous species of the boggy savannas near Post Office Bay, to the remnant Ice Age flora of the Apalachicola bluffs and ravines, this area contains one of Florida's more unique plant assemblages. It is not surprising, then, that this singular region harbors a variety of interesting orchids, at least a few of which are among Florida's least common plants.

According to Clewell (1985), the Panhandle flora includes thirty-seven orchid species from eighteen genera. Many of these are well-known species that are found farther eastward and southward in the state. Several species of the genera *Platanthera*, *Spiranthes*, *Listera*, *Ponthieva*, and *Hexaletris* occur widely in northern and central Florida and are not particularly difficult to find with diligent searching.

At least three species, however, are known in Florida solely from the counties of the central Big Bend. All are listed species by the Florida Department of Agriculture and two are tracked by the Florida Natural Areas Inventory. All are found only in scattered locations and exist in Florida at the southernmost limits of their generally more northern ranges. They are not plants that are often seen by the casual observer.

In the preface to his treatise on the Sunshine State's orchids, Carlyle Luer suggested in 1972 that the downy rattlesnake plantain, *Goodyera pubescens* (Willd.) R. Brown, a species known chiefly from the Piedmont of the Carolinas, the Virginias, north Georgia and eastern Tennessee, should be expected in Florida. In 1977, Angus



Goodyera pubescens, downy rattlesnake plantain, coming into flower.

W. Wilson Baker



W. Wilson Baker

Habit of *Goodyera pubescens*, well-camouflaged in leaf litter.

Gholson and Dr. Robert Kral did, indeed, find the species just outside the east boundary of Torreya State Park (A. K. Gholson, Jr., #6583, AKG Herbarium). A few years later, in 1980, the orchid was found by Gholson in company with Wilson Baker near Rock Creek inside the park (A. K. Gholson, Jr. #10587, AKG Herbarium). Still later, Ann Redmond, Steve Leonard, and Baker found two other sites in what is now The Nature Conservancy's property south of Torreya State Park.

Goodyera is a summer-blooming species with three to eight dark green leaves that are conspicuously crisscrossed with a combination of wide and narrow, creamy white veins that give the foliage a distinctively variegated appearance and make it unmistakable among Florida's orchids. The distinctive leaves are generally present throughout the winter and help in

identifying the plant when not in flower. When flowering, the stem can be nearly 45 cm. tall and is topped with a dense, many-flowered cylindrical raceme of rounded, whitish flowers.

The crane-fly orchid, *Tipularia discolor* (Pursh) Nutt., is a rather frequent, but somewhat inconspicuous, species of open deciduous woods throughout the Piedmont (Radford, et. al., 1968) and in Florida from Jackson to Jefferson counties (Clewell, 1985). In Florida it is also found on bluffs and in floodplains. In the fall, the plant bears a single, green, low-growing leaf that is purplish beneath and conspicuous in the ground cover, once learned. The leaf remains green throughout the winter but withers and disappears in late spring or early summer. In mid- to late summer, *Tipularia* sends up a thin, leafless flowering stalk which may be up to 65 cm. tall and produces as many as forty delicate flowers that superficially resemble crane-flies in overall form. The flowers are pale and range in hue from lemon yellow to rust bronze, brownish, or purplish and white.

The third panhandle specialty is as rare in Florida as *Goodyera*. The whorled pogonia, *Isotria verticillata* (Muhl. ex Willd.) Raf., an erect, glabrous species, 9-35 cm. tall, is known in Florida from one site in Washington County (Anderson, 1986) and another just east of Chattahoochee (A. K. Gholson, Jr. #11941, AKG Herbarium). Its stem is purplish or reddish brown and hollow. The leaves are 3-9.5 cm. long, 2.5-5.2 cm. wide, oblong or lanceolate to broadly obovate or elliptic in shape, and are borne in whorls of five or six at the top of the stem (hence the common name, whorled

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pogonia). The plant bears one or rarely two flowers which are pale yellowish green and purple and terminate the stem. The slender fibrous roots of this species extend for a phenomenal distance from the plant. They run just beneath the surface of the ground and may reach several feet in length. An interesting developmental phase is the continuous and simultaneous growth of the leaves with the flowers and fruit. Almost as soon as the young leaves expand, the flower bud bursts into blossom. By the time the fruit has matured, the leaves have increased four or five times in size.

Whorled pogonia is found in dry or moist sandy pine woods, low, rich, damp hardwoods along streams and floodplain areas, tamarack swamps, shady ravines, boggy situations in upland woods, or on mixed hardwood slopes. It occurs from near sea level in Florida upward of 3,000 foot elevations in North Carolina, Tennessee, and

Virginia, and it flowers from April to the middle of August in various parts of its range. ✨

References

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The authors enjoy botanizing together in North Florida and elsewhere, and after a small amount of well-deserved grumbling, graciously agreed to a last minute request and produced this lovely article, for which the editor is most grateful. The modest authors didn't submit bios, but we know that Angus Gholson was one of the first two recipients of the FNPS Mentor Award, the society's highest award, given for life-long achievements of statewide significance. And Gil Nelson continues to publish eminently useful field guides, the latest of which, *Shrubs & Woody Vines of Florida*, is available through FNPS Subtropical Trader (please see price change on page 16).