GRASS... Some Native Grasses of Florida

by Lewis L. Yarlett

"...In the matter of utility to man and beast, no plant or group of plants have ever played so great a part in the history of the world...nor is the story of the merit of the grasses more than half told when it is related that they are man's bread and meat, many things good, and most things sweet...though of all plants, the most common, the grasses are of all common plants, the least known."

(W.J. Showalter, National Geographic Magazine, 1933)

Native grasses have supplied the needs of man since the beginning of recorded history. Some of the earliest written records of grasses may be found in the Old Testament of the Bible. The theme of grass and its use runs all through Genesis and Exodus, referring especially to Abraham and his nephew Lot. The contents of the tombs and wall inscriptions testify to the importance of grass as early as 4,000 B.C.

The early colonists in America were dependent on native grasses to supply their livestock with feed. Later, when settlers moved into the western U.S., they found vast expanses of prairie, lush with native grasses upon which to base livestock operations.

Florida, likewise, has a history of exploration and settlement uniquely involved with native vegetation, and, more especially, native grasses. Ponce de Leon is reported to have brought a few head of Spanish cattle to Florida in 1521. However, it was not until about 1700 that extensive cattle ranches were established along the St. John’s River near Palatka and in what is now Alachua County. Prior to, and during, the Civil War, cattle were raised throughout north and central Florida. They were raised on native grasses and driven on long cattle drives to supply beef for both the Union and Confederate armies. By the same means they were trailed to Punta Rassa near Ft. Myers and loaded on boats bound for Cuba. These trail drives preceded those of the west by several years.

What were the grasses that these early day ranchers depended upon? Historical records are not specific as to the genus or species. Unfortunately, early explorers and settlers were unable to record this information. Until the middle of the eighteenth century, plant taxonomy was relatively unorganized. Any references on Florida’s flora were mainly lists of local names and short descriptive phrases. Trees, of course, were notably recorded, but the grasses were largely neglected.

Perhaps it was William Bartram (1774) who provided the best description of grasses during his explorations. Paynes Prairie near Gainesville was described as an “...extensive savanna, level green plain, fifteen miles over, fifty miles in circumference and scarcely a tree or bush of any kind...” He further recorded “...beyond which opened to a view an extensive grassy cove of the savanna several miles in circuit...” Stickney (1862) recorded the same savannas or prairies as covered with tall grasses, often fifteen miles in extent.

Stickney’s reference to canebrakes in the uplands was no doubt stands of what we know today as switchcane, (Arundinaria tecta). These species are still present today, but much less abundant, due to mismanagement, especially excessive grazing by livestock.

Botanists and agrostologists began to collect, identify, and classify native grasses in Florida in the late 1800s and early 1900s. Today there are approximately 75 genera with 330 species. Fifty or sixty species may be found in any one county.

A wide diversity of soils in Florida, often in a limited area, produces a variety of species. From the pine-palmetto flatwoods and sandy hills to the marshes, each contribute to the grass flora. Millions of people drive the highways of Florida daily and most likely observe only pines, palmetto, oaks, or palms. A burst of color by the wildflowers in the spring or fall may catch their eye, but grasses do not produce a colorful flower, and thus are not noticed.

To the more observant, a few of the native grasses do add color to the landscape, especially during the fall months. In the pine-palmetto flatwoods, lopsided indiangrass, (Sorghastrum secundum) provides considerable color. This is true if the area has not been grazed by cattle during the summer since the cattle prefer it. The 18-20 inch inflorescence, or seed head, is golden brown, slightly nodding, and stands well above the surrounding palmetto. About 25 species of the bluestem family occur in Florida, many of which add to the fall colors. Bushy beardgrass (Andropogon glomeratus) is especially colorful in the roadside areas with its large silver-like inflorescence. One may also see the plumegrasses, whose inflorescence may be as much as 18-20 inches long and standing 6 and 8 feet above the ground. Not colorful, but exceedingly valued for its forage, is creeping bluestem (Schizachyrium scoparium). This perrenial species which spreads by rhizomes, or underground stems, has been severely overgrazed by livestock since cattle were restricted to pastures by the Florida fence law of 1949. Since about 1960 its value for forage has been recognized by both ranchers and conservationists.

An unusual grass of the flatwoods is...
of growing in only one location in the world. This grass is found on the seepy slopes just off the central Florida ridge in Highlands and Polk counties. Cutthroat grass was first collected in 1917 near the settlement then known as Florinda, located close to the present Indian Lake Estates. Florinda no longer exists.

The threeawn family of grasses are represented by pineland threeawn or "wiregrass", (Aristida stricta). Growing abundantly throughout Florida in the pine and palmetto flatwoods, it has little value for grazing except for a brief 4 to 6 weeks period in the spring following a burn. Its importance as a native grass is rapidly being replaced through management by the more productive and better quality bluestems, panicums and paspalums.

Mention must be made of the native grasses that protect thousands of miles of Florida's shoreline and beaches. Four species of cordgrass (Spartina spp.) occur in the saltmarshes. Equally important is seashore saltgrass, (Distichlis spicata) which is also known as saltwater bermuda. The colorful and protected seaoats, (Chasmanthia paniculata) with their strong root systems, bind the sand dunes. Two species of dune panic grass (P. amarum and P. amaralum) also provide protection to the coastal dunes.

All of the described species plus many others are a part of the flora in the hundreds of natural ecosystems in Florida. Their importance may vary, but all are of some economic, environmental, conservation, or esthetic value. Of foremost importance is the value of native grasses as a source of forage for cattle. Cattle are ruminant animals whose four-compartment stomachs require large amounts of roughage. This portion of the diet is economically and readily available from these grasses, seasonally or year-long, depending upon management. Native grasses are produced almost entirely by solar energy as contrasted to the required fossil fuels needed to produce the forage from planted and fertilized improved pastures. This is important in today's critical energy crisis in grassland agriculture.

Because of the inconspicuous flowers and foliage of most grasses, they have not held the attraction for those who pursue the native flora as a hobby. Many have avoided identification merely because they have heard or thought they were too complicated. Those who want to learn the identification of grasses and their importance will find their efforts to be both exciting and rewarding.

Books

HOW TO JUDGE ENVIRONMENTAL PLANNING FOR SUBDIVISIONS, A Citizen's Guide. Useful to citizens on planning boards, subdivision planners, regional officials, environmentalists, and taxpayers who may own property near a proposed subdivision. This 44-page illustrated booklet is based on research into the practices and problems of big subdivisions in the Southwest and Florida. $2.50 from Environmental Information Center, 935 Orange Ave., Winter Park, FL 32789 or INFORM, 25 Broad St., New York, NY 10004. $2.50 from $1.00

