

12. Prairie

Prairies are flat landscapes that are treeless or nearly treeless and grass-covered. Prairies in Central Florida are divided between wet prairies and dry prairies. The difference between the two is determined by their hydro-periods. Wet prairies normally stay wet during the summer. Dry prairies flood only after heavy rains.

Dry prairies are like Pine Flatwoods with few or no trees. Prairies are dominated instead by wiregrass, several species of bluegrass, broom sedge, saw palmetto, and shrubs like rusty and shiny lyonia, St. Johns wort and blueberry.

Prairies are home to a variety of wildlife. Many distinct bird species are found in prairies, including the threatened crested caracara, burrowing owl, and the threatened sandhill crane, but even the dry prairies on Forever Florida are too wet too often for burrowing owls. Reptiles include box turtle, gopher tortoise, black racer, and the diamondback rattlesnake. Other birds include Black and Turkey vulture and eastern meadowlark. Mammals include the least shrew, cotton rat, harvest mouse, and spotted skunks.

Soil is sandy and acidic, like that of the pine flatwoods. Probably the reason there are so few trees on the prairies is that the hardpan is too close to the surface for the pines to put down a good taproot. Several of the pines that blew down in recent hurricanes show twisted or crumpled taproots instead of long, straight ones. Look for them along the trails, in both the flatwoods and the prairies.

Fire plays an important role in prairies as it clears underbrush, adds nutrients, and promotes seed production. Fire also eliminates competing plants such as broadleaf trees and controls the growth of native shrubs to keep them from growing too large. Fire occurs between 2 and 7 years in the prairies.

Humans have had a major impact on all ecosystems in Florida. For more than 400 years, humans have altered prairies with the suppression of fire and with free-range cattle grazing. The suppression of fire altered the nutrient cycles and plant reproduction. Grazing altered the landscape by changing herbaceous plant production and changing water percolation. Cattle are selective grazers, choosing plants that are more digestible and have higher protein content, so that the species they select gradually disappear. For example, the pine lily, toothache grass and many other native grasses and wildflowers disappear under grazing pressure. If the soil is not disturbed, they can re-appear from long-dormant seeds.

Normally, cattle do not eat palmetto because there is a net energy loss in the process of digesting it. This favors an increase of palmetto under grazing. If, however, cattle receive a high-energy supplement such as molasses, they will eat palmetto.

The introduction of non-native grasses from Africa, South America and Australia to make improved pasture has required the addition of lime and fertilizers to support those grasses, changing the soil chemistry to an extent that would take decades to return to a state that would support native grasses, and centuries to return completely to pre-disturbance status.