NATURAL COMMUNITIES of Florida's Wet Prairies
by Linda Conway Duever

Wet Prairies are particularly fascinating ecosystems because their biological communities must adapt to dramatically different environments as the seasons cycle from wet to dry and back again. In the summer, these are watery worlds where wading birds stalk tadpoles among floating hearts and bladderworts in the shimmering light of reflected blue sky and cottonball clouds. Wetland plants flourish in the summer, then go dormant as upland species grow and bloom after the water recedes. Come a dry winter, pigmy rattlers and skunks prowl through pale gold tufts of wiregrass, and in spring killdeers hatch their fluffy babies in patches of dry sand.

Typically, a prairie will be under water for 50 to 100 days out of the year. In south Florida it is liable to go through a brief transition period, then remain quite dry for most of the rest of the year. In the Panhandle, where rainfall is not so intensely seasonal, these "savannas" may have enough organic matter in the soil to maintain moist conditions for many more months.

Wet Prairie soils are by definition sandy. (The Florida Natural Areas Inventory classifies wet grasslands with peat soil as Marshes and those incorporate varying admixtures of organic and calcareous materials. Soil series include Anclote, Ankona, Arzell, Bas-inger, Charlotte, Hallandale, Immokalee, Lokosee, Malabar, Maggett, Mulat, Myakka, Oldsmar, Ona, Paisley, Pal-metto, Placid, Pomona, Pompano, Pople, St. Johns, Valkaria, Wabasso, and Wauchula.

Fires every one to five years are what maintain Wet Prairies as grasslands. Between burns, wax myrtle (Myrica cerifera), primrose willow (Ludwigia peruviana), and other shrubs grow up and are laced together by tangles of common hemp vine (Mikania scandens), marsh morning glory (Ipomoea sagit-
tifolia), and milkweed vine (Sarcoasteuma clausum).

Unfortunately, fires favor the south Florida Wet Prairies' worst enemy: melaleuca (Melaleuca quinquenervia). The prairies are grasslands rather than true tree-dotted savannas because no native tree is perfectly adapted to their hydroperiod. They stay wet a little too long for pines and dry a little too long for cypress. Melaleuca loves it. Now, many places that once offered scenic vistas across bands of wildflower-sprinkled grass framed by cypress and pineland are choked with these exotic pest trees growing "so thick a rabbit couldn't get through."

Wet Prairie enemy number two is the reason a lot of the fires are set: the Florida range cow. Burning the prairies increases grass growth and enhances the protein content of the foliage, so setting frequent fires is standard range management practice. This isn't so bad. However, the custom of burning during the winter - in an environment with reproductive cycles adapted to summer lightning fires - disrupts biological processes and unnaturally favors certain plants and animals. And the worst problem is that the cattlemen so often allow their animals to overgraze the range and chew up and trample most of the plants, grossly reducing species diversity.

Overgrazed prairies are so commonplace that few people even realize how wonderfully varied the vegetation of a healthy prairie is. On the basis of number of plant species per square meter, a Wet Prairie of the pitcher plant savanna type may ay be the most diverse plant community on earth! On the mini-scale, these The most common herbaceous species include hatpins (Eriocaulon compressum), meadow beauty (Rhexia spp.), pink sundew (Drosera capillaris), yellow colic root (Aletris lutea), floating heart (Nymphoides aquatica), common St. John's wort (Hypericum fa-siculatum), common pipewort (Eriocaulon decangulare), purple blad-derwort (Utricularia purpurea), floating blad-derwort (Utricularia inflata), pick-erel weed (Pontederia cordata), sag-it-taria (Sagittaria lancifolia), lemon bacopa (Bacopa caroliniana), Nash's blue-eyed grass (Sisyrinchium nashii), grass pink (Calopogon tuberosus), grassleaf ladies' tresses (Spiranthes praecox), yellow-eyed grass (Xyris spp.), marsh pink (Spatinia spp.), colic root (Aletris farinosa), candyweed (Polygala lutea), wild bachelor's button (Polygala nana), white-spike milkwort (Polygala boykinii), yellow milkwort (Polygala ramosa), rain lily (Zephyranthes simpsonii), piriqueta (Piriqueta caroliniana), and gerardia (Agalinis spp.).

Prominent grasses and grasslikes are wiregrass (Aristida stricta), toothache grass (Ctenium aromaticum), maiden-cane (Panicum hemitomum), sand cord-grass (Spartina bakeri), striped beakrush (Rynchospora tracyi), stoloniferous spikerush (Eleocharis elongata), common spikerush (Eleocharis cellulosa), whitetop sedge (Dichromena colorata), star rush (Dichromena latifolia), and sawgrass (Cladium jamaicensis).

Among the rarer plants are whitetop pitcherplant (Sarracenia leucophylla), parrot pitcherplant (Sarracenia psittacina), trumpet pitcherplant (Sarracenia flava), hooded pitcherplant (Sarracenia minor), and Barbara's buttons (Marshallia tenuifolia). Probably more than half of Florida's parks and preserves have at least small patches of this widespread habitat type. Particularly good places to see nice examples include Apalachee National Forest, Kissimmee Prairie Sanctuary, Myakka River State Park, Fakahatchee Strand State Preserve, and Corkscrew Swamp Sanctuary.

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