Croatan National Forest, Wildfire of Summer 2009 [written mid-October 2009]

In late July 2009, a wildfire began in the southern portion of the Croatan south of Millis Road. It is thought to have started from a lightning strike. This fire persisted for several days and, together with backfires set by the Forest Service, eventually affected up to about 2500 acres. The burned area extends north Millis Road, east to Nine Mile Road, and south to Deep Sand Road.

Because the borders of the burned area are so accessible, this gives visitors an excellent opportunity to visit longleaf pine and pocosin habitats that have been burned over recently, and to view the procession of ecological changes that follow such fires. An added bonus is that the 2009 fire occurred during the growing season. Most of the species found in the area are best adapted for growing season fires, and thus the ecological benefits of growing season fires are best. The benefits of the 2009 burn should be readily evident into the beginning of the 2010 growing season.

A great place to view the effects of the 2009 fire is the Millis Road Savanna. [From the Nine Mile Road, take Millis Road (FSR 128) westward for 1.4 miles. At this point, the savanna begins on your left.] If you walk out into the savanna, you will see that most of the longleaf pines now look fine, even though many were badly "singed" right after the fire. You will also notice that the wiregrass (the major grass of the site) is now seeding abundantly—the species will develop flowers and seeds only after fire. A major beneficiary of the seeding wiregrass is the Bachman's sparrow, which in the Croatan is largely dependent on wiregrass (and thus regular fire). It used to be thought that this species did not winter as far north as the Croatan. However, we now know that when the habitat is good, as it will be at Millis Road Savanna this coming winter, that the species may actually be fairly common here in winter. (However, in winter this predominantly ground species becomes extremely secretive, more mouse than bird.)

Millis Road Savanna, August 2009. Two weeks after the fire, there is already a bright green carpet of a new growth of wiregrass and other grasses and herbs. At the savanna, virtually no longleaf pines—a highly fire-resistant species—were killed by the fire.

Beginning in October, you may see some intensely blue flowers scattered across the savanna; these are flowers of the pinebarren gentian. If the early winter is not severe, some of these flowers might be found into early January, maybe later. Along the borders of the pine savannas, where they meet the dense shrub bog (pocosin) vegetation, look for the purplish fruiting tops of the pinebarren sandreed. As is the case with wiregrass, the sandreed flowers and sets seed only after fire. The sandreed is the larval food plant for a very rare species of butterfly, the arogos skipper (see below).

If there is any negative ecological consequence to the 2009 fire, it involves the arogos skipper. This rare and declining little butterfly is associated with prairie and savanna habitats. In North Carolina, perhaps the only location where it still exists is Millis Road Savanna. For this species, fire presents a double-edged-sword situation—fire is needed to provide habitat, to maintain the open herbaceous cover, including the pinebarren sandreed, on which the skipper is dependent. However, if a fire is too extensive and takes place when all the skippers are in the larval stage, then the entire population can be literally burned up. There is concern among entomologists that this may have happened with the 2009 fire. Time will tell.

Stargrass. One of the first flowers to emerge after the fire was the stargrass. Another flower seen in the first few days following the fire was a many-flowered grass-pink, a rare and short-lived orchid that had never been found this far north before.

As noted above, the benefits of the fire should be evident into the 2010 growing season. Next spring's wildflower display should be better than average, and species like the Venus flytrap should be easy to find. Because Bachman's sparrows will overwinter this year, their songs may begin to ring across the savanna as early as the first warm days of February.

Bachman's sparrow. This species, which is largely dependent on wiregrass and regular fire, will experience a population boom following the 2009 fire.