

Restoring longleaf pine forests with birds in mind

As thousands of acres of forest are restored with assistance from a variety of conservation programs, the value of restored stands for birds and other wildlife is a consideration.

The opportunity for bird habitat was assessed by the University of Georgia after changes in the U.S. Department of Agriculture (USDA) Conservation Reserve Program (CRP) in 1998 established a National Longleaf Pine Conservation Priority Area (CPA). The CPA encourages landowners to reestablish longleaf pine habitat by converting old agricultural fields to longleaf pine stands. Nearly three-fourths of the counties in Georgia are included in the area.

The restored pine plantings can be managed in such a way that could provide significant habitat for grassland and shrub-scrub birds.

Researchers assessed the initial vegetative and avian response to the conversion of 41 crop fields to young stands of longleaf pine in Georgia. The fields had been entered into the program for 1 to 2 years.

“Restoring longleaf pine ecosystems on old agricultural fields involves more than just planting trees,” says Dr. John Carroll of the Warnell School of Forest Resources at the University of Georgia. “Many years of succession will be required to mimic the animal and plant communities originally present in these areas. However, it is possible that wildlife communities could respond relatively quickly and positively to management implemented by the National Longleaf Pine CPA,” he adds.

Four important and declining grassland species were detected during the study; 10 shrub-scrub species were detected in 2001, and 15 were detected in 2002. Of the 30 nonearly successional/shrub-scrub species detected in

the 2-year study, 13 have had significant population declines.

Shrub-scrub species tended to occur more in the longleaf pine fields than grassland species, but declining grassland species were found in more than 25 percent of the fields.

Vegetative structure was important to both grassland and shrub-scrub species.

Recommendations

The Longleaf Pine CPA offers enormous opportunities for the reestablishment of critical habitat for a large number of grassland and shrub-scrub songbirds. However, there are a number of challenges and management opportunities to make it better.

- Ground vegetation management is critical to restoring the value of these stands to birds. Control of agricultural pasture plants such as bahiagrass and bermudagrass is critical to allow native vegetation to compete.
- Planting strips of native forbs and grasses is important in those areas where seed banks are minimal.
- Complete ground vegetation control should be discouraged unless it is a precursor to the planting of native ground vegetation.
- Larger fields were beneficial to some grassland species in this landscape matrix of open and forested habitats. Larger field sizes should be encouraged.

More detailed information on the study is available online in a USDA Natural Resources Conservation Service (NRCS) technical note, according to Ed Hackett, biologist with the NRCS Agricultural Wildlife Conservation Center (AWCC), which funded the study. The AWCC, located in Madison, Mississippi, is a fish and wildlife technology development center.



Photo by Dot Paul, NRCS

Longleaf pine in grass stage

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