

CP33: A win-win for wildlife & agriculture



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Strategically targeting agricultural conservation practices toward specific wildlife habitat and population objectives produces substantial benefits for focal species. These benefits are achievable with minimal or positive effects on agricultural production and profitability, according to a new study.

A scientific paper [published in early view in the journal Conservation Biology](#) April 29, 2014 demonstrates that strategically targeting agricultural conservation practices toward specific wildlife habitat and population objectives produces substantial benefits for focal species. These benefits are achievable with minimal or positive effects on agricultural production and profitability. In this study the grass buffers comprised <2 to 7% of the landscape, with changes in primary land use occurring mostly in lower-yielding field margins.

Dr. Wes Burger and Dr. Kristine Evans from Mississippi State University's Department of Wildlife, Fisheries and Aquaculture conducted and published the study. Their research examined differences in breeding bird densities on row-crop fields on which landowners had established 30- to 120-foot native grass buffers (linear field margins) versus fields in the same landscape that were cropped to the field edge. Native grass buffers were enrolled as part of the continuous sign-up [Conservation Reserve Program](#) practice "Habitat Buffers for Upland Birds," commonly called CP33. Landowners enrolling in this practice received CRP cost-share and incentive payments to establish and

maintain the practice over the 10-year life of the contract.

Targeted CRP conservation practice inspires coordinated monitoring

CP33 is the first CRP conservation practice designed specifically to address population recovery objectives of a national wildlife conservation initiative (the [National Bobwhite Conservation Initiative](#)). CP33 rules stipulated that wildlife response to CP33 buffers must be monitored to provide evidence of programmatic benefits. As this was the first CRP conservation practice to require wildlife monitoring, the Southeast Quail Study Group (now the National Bobwhite Technical Committee) saw opportunity. They worked with researchers from Mississippi State University

"Regional differences in bobwhite densities and response to CP33 buffers were not unexpected in this study and demonstrate that differences in land use and available habitat in different regions will influence species response to habitat conservation," Dr. Evans said. "Now that we see we can successfully target a conservation practice to a species, it is clear that ubiquitous application of that practice across a species' range will not reap the greatest conservation benefits. We now know where to target these practices to have the greatest return on investment."
- Dr. Kristine Evans, former national CP33 Monitoring Coordinator

to develop a large-scale multi-agency coordinated monitoring effort to compare differences in population response across the range of bobwhite and other grassland bird species that might benefit from this practice.

The resulting 6-year National CP33 Monitoring Program spanned 10 ecological regions in 14 states and was implemented with the cooperation of 24 state and federal agencies, non-profit organizations, and universities.

“This large-scale coordinated monitoring effort was an overwhelming success and exemplifies how the diverse conservation community can successfully partner together to collect important biological data that is seamless across state and regional boundaries,” Dr. Evans, the former

National CP33 Monitoring Program Coordinator, stated. Reggie Thackston with the Georgia Dept. of Natural Resources praised the study: “This landmark project was successful in great part due to the excellent efforts of Drs. Kristine Evans and Wes Burger at Mississippi State in coordinating the data collection, reporting and analysis.”

Regional targeting of conservation practices supported



Breeding densities of northern bobwhite, the target species of interest, were two times greater on fields where CP33 buffers were established than

non-buffered fields. However, bobwhite densities differed by region. Bobwhite in some regions, such as the Mississippi Alluvial Valley and Eastern Tallgrass Prairie, showed tremendous response to CP33, while response was negligible in other regions, such as the Central Mixed-grass Prairie in the western portion of the bobwhite range.

Other grassland bird species responded favorably as well, including the field sparrow and dickcissel. However, grassland bird species that favor shorter and sparser grassland habitats demonstrated variable responses each year and tended not to favor tallgrass habitats in CP33 buffers. “The results we observed provide further evidence that grassland birds respond to structure, and conservation actions targeting a mix of grassland bird species should provide a patchwork of tall and short grasses to meet the needs of most species,” Dr. Evans said.

“CP33 monitoring helped prove that native field buffers are a common sense conservation practice that provides strong returns on taxpayer investments to integrate management for priority wildlife species with intensive and sustainable agriculture.”
- Reggie Thackston, Georgia DNR

John Morgan with the Kentucky Dept. of Fish & Wildlife Resources said, “The CP-33 monitoring project was successful because an investment was made to understand the practice’s value. . . . Billions of dollars are spent on USDA conservation practices nationwide, but exceptionally few are spent on understanding the public benefits of those investments.”

The conservation community is working smarter

This project clearly demonstrates that the conservation community as a whole is thinking smarter, more strategically, and more cohesively across geopolitical boundaries – considering not only how conservation practices are designed and delivered, but also how wildlife populations respond to these practices and how those responses can be

“It is possible and feasible to measure programmatic responses of conservation programs at regional and national scales. USDA invests billions in Farm Bill conservation programs to create habitat on private working lands. The relatively small investment in measuring outcomes is an essential part of strategic habitat conservation and should be programmatically budgeted.”
- Dr. Wes Burger, Mississippi State University

cost-effectively measured. Total federal costs for monitoring were only 1 to 2% of total programmatic costs.

Assessment of species responses to conservation

practices provides a feedback loop that can improve future conservation efforts. In addition, pooling resources through coordination saves a lot of money in the long run. Above all, regional targeting of conservation practices can increase benefits to wildlife.

Dr. Burger concludes, “Conservation buffers planted to the right plant materials and put in the right landscapes can produce population responses disproportionate to the relatively small change in primary land use. Conservation buffers as part of a comprehensive restoration plan can measurably contribute to population goals of regional and national conservation initiatives.”

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