



Northern Bobwhite Management on Private Lands

Historically, abundant bobwhite populations were an accidental byproduct of broadly applied land-use practices. In modern landscapes, the intentional creation and maintenance of early successional native plant communities is generally required to produce sustainable bobwhite populations. The magnitude of bobwhite population response to habitat management is scale-dependent. This means that the more intensive and extensive the habitat management, the greater the bird response. Expected population response to management is also influenced by landscape context. Throughout the South, there are numerous large (3,000-5,000 ac) public and private properties under varying degrees of active management. The degree of habitat management on these properties depends on landowner objectives and knowledge of conservation practices and opportunities. Management can vary in scale and intensity ranging from no management, to broadly applied but low-intensity conservation buffers, to comprehensive conservation involving a suite of conservation practices integrated throughout a production system.

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Coahoma County, Mississippi Property Management

Coahoma County is located in the Lower Mississippi Alluvial Valley (Delta) and is characterized by large-scale rowcrop farming.

This case study focuses on a 6,400 acre property managed for row crops and recreational hunting.

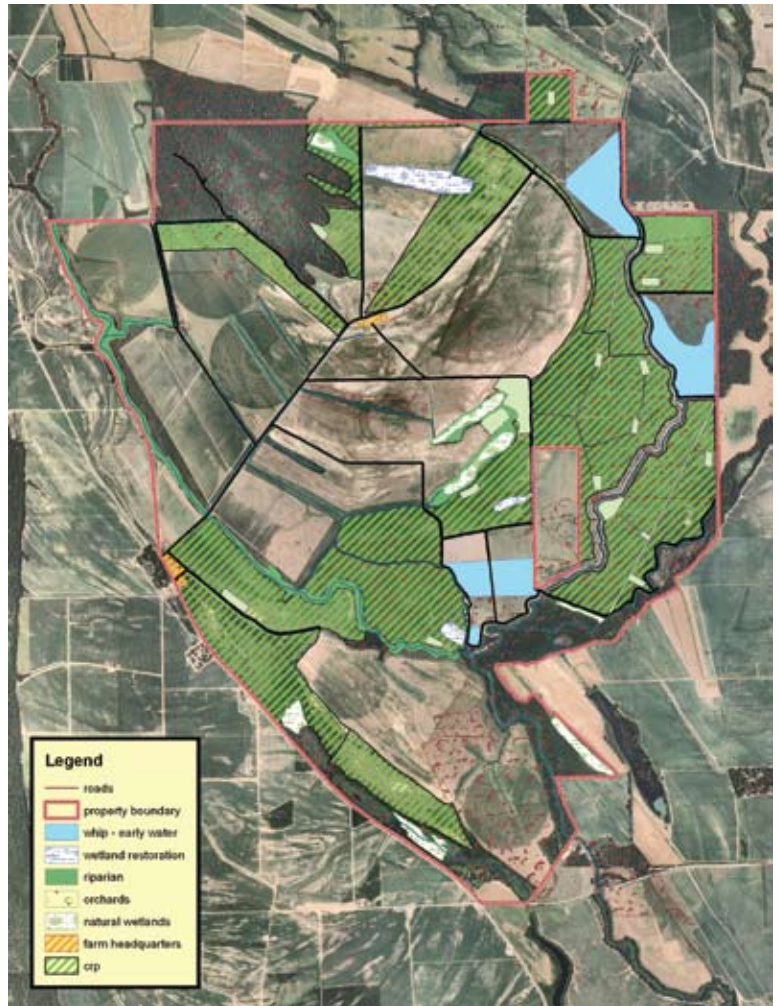
Bobwhite are not a specific management objective, but instead are a desirable by-product of broadly applied conservation practices.

Thirty three percent of the area is maintained in conservation practices that provide early successional habitat.

The property is composed of 48% row crop (cotton, soybean, and corn), 30% hardwood reforestation, 14% forested or herbaceous wetlands, 4% conservation buffers, 2% forested, and 2% herbaceous drains.

Conservation practices include CRP CP3a hardwood trees (planted in 1999 - still in early successional stage), CP22 riparian buffers (planted in 2004 - still in early successional stage), and CP21 filter strips (planted in 2004 with native warm-season grasses).

Conservation planning was accomplished by a consultant wildlife biologist working with USDA-NRCS field office personnel. Conservation practices were implemented under the WHIP, CRP, (USDA-FSA), and U.S.F.W.S. Partners Programs.





Coahoma County, Mississippi Property Management

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Early successional riparian forest buffer



Switch grass filter strip



Early successional afforestation blocks

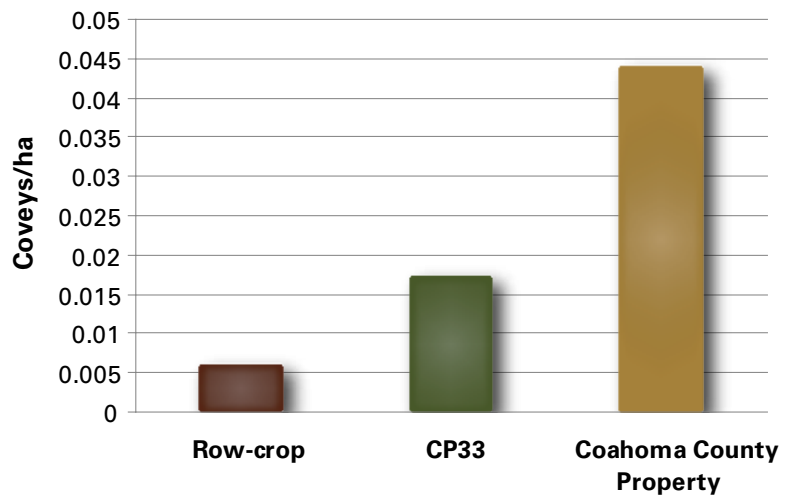


CP21-Native grass filter strip

Effects of Integrated Management

- In the absence of bobwhite management, 2007/2008 fall densities in the Delta averaged 1 covey/157 hectares or 1 bobwhite/13 hectares (assuming 12 bobwhites/covey).
- Addition of CRP CP33 field buffers almost tripled fall density to an average of 1 covey/57 hectares or 1 bobwhite/5 hectares.
- Within the Coahoma County property, NWSG upland habitat buffers and filter strips are simply one component of a more comprehensive conservation management system. On this property, farm-level fall densities were 1 covey/23 hectares or 1 bobwhite/2 hectares.
- Broadly applied conservation practices that created early successional habitat produced bird densities 7 times greater than the surrounding landscape.

Northern Bobwhite Fall Covey Densities, 2007/2008



Forest and Wildlife Research Center Note

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