



# 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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## Panola County, Mississippi Property Management

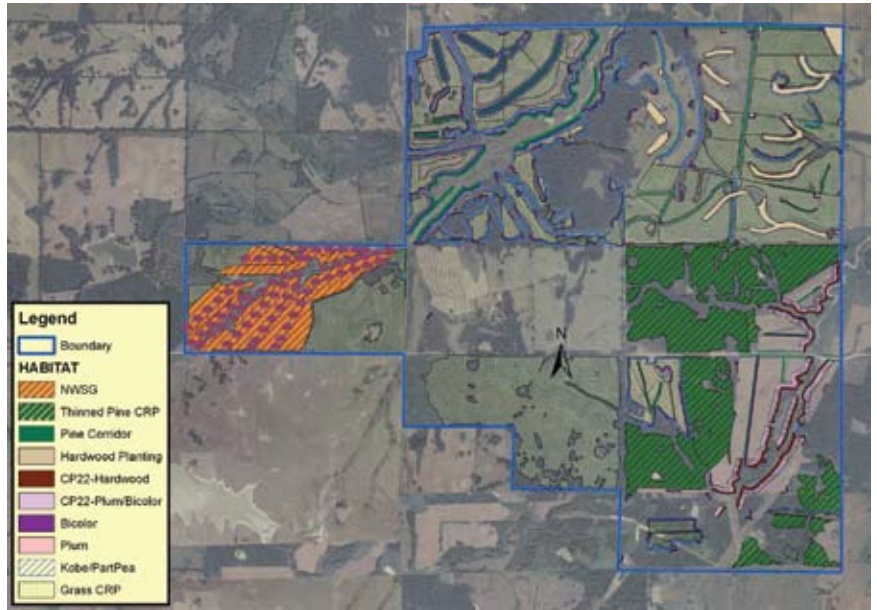
The Panola County tract is a 3,200 acre property located in the Loess hills of Northwest Mississippi.

Prior to 1997, the property was primarily dedicated to the production of row crops, forage crops, and forest products. Over the past decade the property has been systematically managed for wildlife habitat. Today, 75% of the property is actively managed for bobwhite with the goal of creating excellent recreational hunting opportunities.

The management objective was to provide 100% usable habitat for bobwhite within portions of the property allocated to wildlife habitat and increase the habitat quality in areas currently supporting birds.

Management practices included:

- Herbicidal eradication of fescue and bermudagrass;
- Conversion of row crop to native-warm season grasses (NWSG), forbs, and legumes;
- Management of existing grass CRP fields using strip-disking and prescribed fire;
- Rotational food plotting to provide additional food resources;
- Establishment of shrub thickets, wooded drains, and corridors for loafing, winter, and escape cover;
- Installment of grass/legume field borders on agricultural fields;
- Creation of transition zones between forest edges and early successional landscape;
- Heavy thinning, herbicidal midstory control, and prescribed burning of pine plantations.



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.

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Diverse CRP field managed with strip-disking and fire



Rotational food plots



Heavily thinned CRP pines management with fire



Shrub and legume plantings

## Effects of Integrated Management

- In the absence of bobwhite management, 2007/2008 fall densities in the surrounding landscape of the Southeastern Coastal Plain averaged 1 covey/72 hectares or 1 bobwhite/6 hectares (assuming 12 bobwhites/covey).
- Addition of CRP CP33 field buffers to this landscape more than tripled fall density to an average of 1 covey/22 hectares or 1 bobwhite/1.8 hectares.
- The Panola County property, a landscape primarily dedicated to bobwhite management, produced farm-level fall densities of 1 covey/7 hectares or 1 bobwhite/0.6 hectares, bird densities that were almost 10 times greater than the surrounding landscape.
- Habitat management produced bobwhite populations sufficient to support excellent recreational hunting.

### Northern Bobwhite Fall Covey Densities, 2007/2008

