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# Farm Bill conservation practices improve northern bobwhite habitat

**P**lant composition and structure resulting from establishing conservation practices with U.S. Department of Agriculture's (USDA Farm Bill funding improves habitat for bobwhite quail in nearly all cases, a study by Clemson University indicates.

The study established, demonstrated, and evaluated practices funded by the Wildlife Habitat Incentives Program, including filter strips, field borders, forest stand improvements, forest openings, prescribed burning, hedgerow planting, riparian forest buffers, and native warm-season grass plantings.

"These practices have a tremendous potential to improve wildlife habitat," says Dr. Greg Yarrow of Clemson University.

Yarrow established the practices using USDA Natural Resources Conservation Service (NRCS) guidelines at the 2300-acre Pee Dee Research and Education Center outside of Florence, South Carolina, then evaluated them against control sites. The evaluation was made based on habitat requirements for the northern bobwhite quail.

A major recommendation of the study was to use a mixture of planted and unplanted (fallow) sites to establish native, early successional habitat. "Planting ensures a desirable mixture of native plants, while fallow areas are less costly to landowners," Yarrow explains.

"It will also be important to use herbicides, disking, or fire to maintain habitats, and for the NRCS to be flexible in establishment and maintenance guidelines to allow for local conditions."

Highlights of the study include:

- Planted and fallow filter strips and field borders provided habitat for bobwhite quail.

- Forest stand improvements and forest openings in combination with prescribed burning provided the greatest benefit to bobwhites.
- Riparian forest buffers were slow to establish but eventually developed over time.
- Hedgerow plantings were also slow to develop and control of invasive weeds was a problem.
- Controlling invasive weeds was key to establishing and maintaining native warm-season grasses.

A landowner survey was also conducted in 2007. Results included:

- Most were familiar with Farm Bill wildlife conservation practices.
- A majority had signed up for programs and were satisfied.
- Those who signed up heard about programs through newspapers or mailings.
- Those who signed up were motivated by other landowners who participated, demonstrated, or passed along knowledge of programs and practices.
- Those who had not signed up indicated they would be more inclined to participate if smaller parcels of land could be signed up under the same contract, more technical assistance was available, and there were fewer restrictions.

The results add to the science available on bobwhites, says Dr. Wes Burger of Mississippi State University (MSU), who coordinated 11 studies across the quail range, and Ed Hackett, a 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.



Field border (*top*); Prescribed burning (*bottom*)

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Summary of:

One in a series of summaries from the NRCS Bobwhite Restoration Project, Agricultural Wildlife Conservation Center Project # 68-7482-3-121

For more information, see:

USDA/NRCS Bobwhite Restoration Project online at <http://www.cfr.msstate.edu/nbci>

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