

USDA's Conservation Security Program and Quail Restoration in Scott County, Missouri: A Case Study

Background

Southeastern Missouri's Scott County is the first county in the nation to meet the quail habitat and population goals of the Northern Bobwhite Conservation Initiative (NBCI). Through collaborative efforts of the Natural Resources Conservation Service (NRCS), the Farm Service Agency (FSA), the Missouri Department of Conservation (MDC), and the Scott County Soil and Water Conservation



District (SWCD), the landscape of Scott County has once again become quail friendly by utilization of the USDA's Conservation Security Program (CSP).

USDA conducted the first CSP signup in Scott County in 2004. Producers planted more than 7000 acres of field borders, center pivot corners, and other strips to native grass and wildflower mixes the following two years. Borders were planted to a switchgrass and native forb mixture to meet the wildlife-friendly requirements. In many cases, shrub plantings were required due to the lack of shrubby cover in, or adjacent to, the CSP contract. Today these border plantings are established and provide the needed nesting, brooding, and escape cover that had been lacking in this intensively farm area.

Quail Monitoring

CP33 monitoring in the Southeast Region from 2006 and 2007 indicated that more than five times as many coveys were found on CP33 survey sites compared to random non-buffered sites. According to Tables 1 and 2, this result is better than any other survey region in Missouri. Additionally, the 2007 Annual August Roadside Survey indicated quail in the Mississippi Lowlands region affected by CSP had increased by 200 percent over 2006 populations. This increase was also better than any survey region in Missouri and coincides with the establishment of the majority of the field borders entered into the program.

Personal Testimonials

Hunters noticed the response of the local quail population during the 2007 hunting season when multiple hunting parties found more than a covey per hunting hour. This is a better average than documented by Department hunter surveys from the late 1940s through the late 1970s. Buck Hunter, a member of the Missouri Quail and Grassland Bird Leadership Council, reports ". . . hunting near New Madrid on the last Sunday of the season. We made five stops and found six coveys in about four hours. I haven't done that in 15 or 20 years. The programs are working"

Scott County CSP producer Patrick Hulshof remarked, "When we are working the fields, we are seeing quail everywhere." Hulsof was so excited he joined Quail Unlimited after harvest season.

Local quail hunter Mike Riley says, "Before CSP came along, I would find a covey during a typical half-day hunt." Riley was excited upon finding three and four coveys in half-day hunts on CSP farms. "The average size of the coveys before CSP was about eight birds, but today we are seeing mostly 15 bird coveys," Riley reports.

Missy Marshall, executive director of the Sikeston Area Chamber of Commerce, reports that local cafes and businesses are noticing quail hunters coming back to the area for the first time in many years. "As a chamber director I am very pleased when I hear the hunters commenting on the increase in quail they have seen in the area. Hunting has an economic impact on our area because just like the regular tourist, hunters coming to the different communities spend money at the gas stations, restaurants/cafés, stores, and so on. It is amazing what increasing a bird species in an area can do for the human population that inhabits it."

Preconditions

Prior to the implementation of CSP, the Mississippi Alluvial Floodplain landscape of Scott County consisted primarily of row crop agriculture (primarily beans, wheat, corn, and some cotton) with narrow wooded fencelines along property boundaries and narrow wooded strips along ditches and other watercourses. According to Missouri National Agricultural Statistics Service data, the amount of land devoted specifically to wildlife habitat was insignificant and approximately 95 percent of the county was row cropped or close-grazed pasture. Additionally, less than 250 acres in the Conservation Reserve Program (CRP) was deemed suitable for quail (2003 FSA Conservation Reserve Program reports).

Post CSP Conditions

During development of the NBCI step-down plan for Missouri, MDC utilized the Bird Conservation Region and state habitat goals to develop county level goals for MDC staff. These goals were incorporated into eight regional plans and numerous focus area goals. Goals for Scott County included CRP and Improvable Agriculture Land totaling 4500 acres of habitat.

These goals were met and exceeded as follows:

- **CRP** - 1625 acres of native grass, which will be subject to mid-contract management including 1334 acres of CP33; and 200 other acres of CRP will have mid-contract management applied annually
- **Environmental Quality Incentive Program (EQIP)** – 2004-2007 wildlife-friendly field border acres installed: 79
- **MDC Idle Land Acres:** 178
- **SWCD** – Special Area Land Treatment (SALT) Wildlife Friendly Field Borders: 229

- **CSP New Practice Payment Field Borders** acres installed: 1219
- **CSP Quail Covey Bundle Field Borders** acres enrolled: 1395
- **CSP Unharvested Grain** acres (estimated): 700
- **Acres of field border installed without above listed cost share, incentives, or enhancements** (estimated) in order to meet CSP requirements: 2000

TOTAL - 7134 acres

Most of the SWCD, EQIP, and CP33 field borders were installed to meet CSP requirements. Scott County is in the top five Missouri counties for number of CP33 acres, largely due to CSP. This amount of habitat converted 3.5 percent of the county's cropland. However, the impact on the amount of cropland on individual farms enrolled in CSP is much larger, averaging approximately 10 percent of cropland converted to habitat as seen in the following examples:

Three Random Examples of Scott County Tier 3 CSP Impacts on Habitat Per Contract:

- 1) 1218 acres in contract
 - a. 118 acres CP33 and CSP field borders installed (10 percent of contract acreage)
- 2) 573 acres in contract
 - a. 25 acres EQIP and CSP field borders installed
 - b. 56 acres CSP Unharvested Grain
 - c. (a. and b. total 14 percent of contract acreage)
- 3) 374 acres in contract
 - a. 6.3 acres CSP field border
 - b. 16.2 acres CSP unharvested grain
 - c. .7 acres EQIP windbreak
 - d. (a., b., and c. total 6 percent of contract acreage)

Economics

The Food and Agricultural Policy Research Institute's (FAPRI) analysis of CP33 field borders in Missouri indicate a return to the family farm of \$0.25 to \$2.50 annually per acre of farm when CP33 is used adjacent to field borders which are sapped by trees. By adding the additional wildlife enhancement payments, CSP can add more than \$15 annually per acre of farm that is under CSP contract. The extra CSP incentives offer the ability for wildlife habitat to become economically feasible for producers to plant and manage. Many producers installed field borders at their own cost, and annually plant or disk the standing grain areas to qualify for the CSP incentives.

In three years, Scott County, Missouri, has achieved the habitat restoration goals in the Missouri step down plans for the NBCI, a 20-year plan. This accomplishment would not have been possible without CSP, CRP, strong conservation partnerships, and conservation-minded agricultural producers.

APPENDIX

Table 1. Missouri CP33 Monitoring Results - 2006

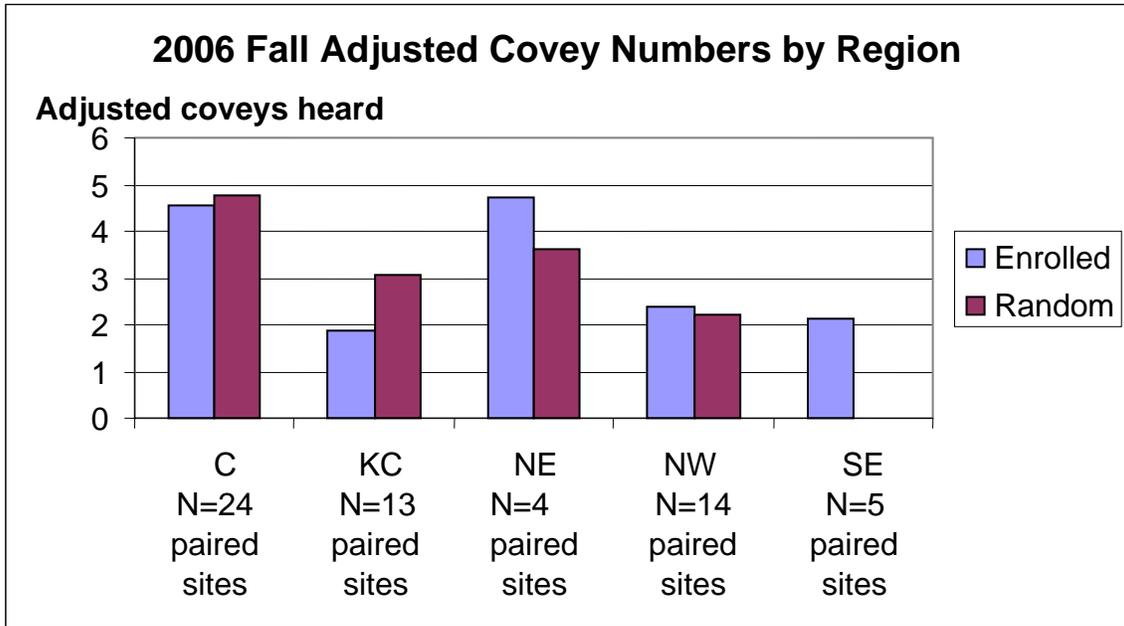
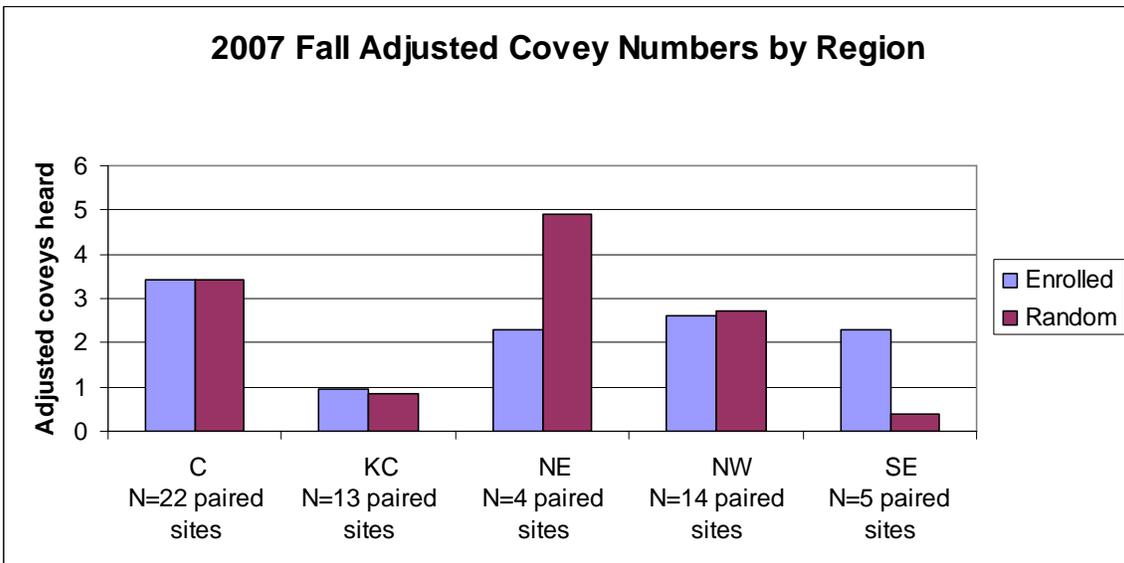


Table 2. Missouri CP33 Monitoring Results - 2007



**Table 3. Mississippi Lowlands Region Hunter Survey Results –
Hunting Hours Per Covey**

| Year | Hunting Hours Per Covey |
|-------|----------------------------|
| 1948 | 1.6 |
| 1957 | 1.4 |
| 1968 | 1.6 |
| 1977 | 1.4 |
| 1988 | 1.5 |
| 1999 | 2.7 |
| 2007* | .67-1.0 |

This information was taken from Department Hunter Survey Reports by Rudolph Bennitt, Jack Stanford and Tom Dailey.

*It should be noted that the 1948-2000 information was obtained from scientifically conducted hunter surveys, which are an average of all reported hunting trips. The 2007 information was obtained through conversations with several hunting parties in Scott County who concentrated solely on land enrolled in CSP.

March 17, 2008