

# COMPARISON OF METHODS TO CAPTURE BOBWHITES DURING SUMMER

Shane D. Wellendorf

Fisheries and Wildlife Sciences Program, North Carolina State University, Raleigh, NC 27695-7646, USA

A. Vincent Carver

Tall Timbers Research Station, 13093 Henry Beadel Dr., Tallahassee, FL 32312, USA

William E. Palmer

Tall Timbers Research Station, 13093 Henry Beadel Dr., Tallahassee, FL 32312, USA

## ABSTRACT

Live-capturing northern bobwhites (*Colinus virginianus*) using baited funnel traps during summer often is inefficient. Previous methods to attract wild bobwhites to a trap site have included bait (typically cracked corn), or use of a pen-raised female bobwhite inside the trap. It has been suggested that playing electronic recordings of the bobwhite's "koi-lee" call at the trap site may improve trap success, but this idea has never been tested. Therefore, in July 1999, we collected trapping data from farms in Wilson County, North Carolina and Tall Timbers Research Station (TTRS) in Leon County, Florida. Trap sites were randomly assigned each day with 1 of 4 treatments including bait only, bait with electronic calling (bait and call), pen-raised female bobwhite (hen), or a hen with electronic calling (hen and call). Traps were set starting at sunrise and were checked after sunset. We captured 87 males, 10 females, and 3 immature bobwhites in 500 trap nights. At TTRS, number of bobwhites caught per 10 trap nights was 0.5 for bait, 0.2 for bait and call, 4.2 for hen, and 4.4 for hen and call. At Wilson, number of bobwhites caught per 10 trap nights was 1.0 for bait, 0.4 for bait and call, 1.3 for hen, and 3.3 for hen and call. Trap success for the hen only and hen and call treatments varied between sites. At TTRS, use of hens greatly improved capture success compared to using bait, but little difference was observed between hen only and hen and call treatments. Conversely, at Wilson, hen only and bait only treatments had similar capture success, but the hen and call treatment was 2.5 times more successful over the other treatments. Electronic calling appeared to have attracted bobwhites to the trap vicinity and the hen appeared to encourage bobwhites to enter the trap. This circumstance was especially evident at Wilson where the overall bobwhite abundance was low and the distribution was unequal across the landscape. We recommend using pen-raised female bobwhite and electronic calling to maximize trap success during the bobwhite breeding season on areas with low to moderate bobwhite densities.

**Citation:** Wellendorf, S. D., A. V. Carver, and W. E. Palmer. 2002. Comparison of methods to capture bobwhites during summer. Page 219 in S. J. DeMaso, W. P. Kuvlesky, Jr., F. Hernández, and M. E. Berger, eds. Quail V: Proceedings of the Fifth National Quail Symposium, Texas Parks and Wildlife Department, Austin, TX.