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## NORTHERN BOBWHITE HABITAT USE IN A FOREST-DOMINATED SYSTEM

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#### **ABSTRACT**

Changes in land use that reduce habitat availability and quality for northern bobwhites (Colinus virginianus) are thought to be the major cause of bobwhite population decline in the Southeast. Increased conversion of open habitats to densely stocked pine plantations has contributed to habitat loss. We examined bobwhite habitat use in the Upper Coastal Plain of Georgia, a landscape dominated by forests and agriculture. The purposes of this study were to monitor habitat selection by bobwhites in this forest and agriculture system and to determine what role pine plantations, including those established as a conservation practice of the Conservation Reserve Program, have within bobwhite's selection of habitat types. To date little research has been conducted to determine bobwhite habitat selection within this forest and agriculture dominated system. Many bobwhite research studies have been undertaken on intensively managed lands in the southeastern United States. Many landowners and land managers may not have the resources necessary to manage their lands exclusively for bobwhites. This study was conducted on lands where landowners had multiple objectives in mind, such as agriculture, timber, and wildlife. We determined home range sizes and habitat selection of 55 radiomarked bobwhites during 1997-2000. Selection of habitats by radiomarked bobwhites supported our hypotheses that they would prefer early-successional habitats within the forest-dominated study area. Selected habitats included fallow fields and open-canopy planted pines whereas agricultural areas and closed-canopy planted pines were avoided. Thinning to create open-canopy planted pine stands will benefit bobwhites by providing additional early successional habitat. Bobwhites selected open canopy planted pine and fallow field habitats in preference to closed-canopy planted pine and agricultural areas. Our results suggest that managing fallow fields and open canopy planted pine habitat for bobwhites will provide preferred habitat within this landscape and is feasible for the average landowner.

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