

KY TWS Conference Poster Abstract

Title: Assessing the influence of habitat characteristics and brood parasitism on wood duck nest box use and success.

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As with most Avian species, we have seen declines in waterfowl species largely driven by habitat loss. Population stability of waterfowl depends on breeding success, which is influenced by the availability and quality of ecosystems used during the breeding season. Given the importance of breeding success, management for waterfowl is often implemented, which may include moist soil management, planting food plots, and construction of artificial nesting boxes. Wood ducks (*Aix sponsa*) are one waterfowl species that respond particularly well to the construction of artificial nest boxes. Scarcity of suitable nest sites over parts of the wood duck's range justifies the use of artificial nest boxes to establish and maintain populations. Each artificial nesting box requires maintenance through time to ensure continued use and nesting success. The objective of our study is to monitor the use of artificial nesting boxes by wood duck on Land Between the Lakes to determine the habitat attributes that influence nest success and productivity and interactions of these variables with nest parasitism. Trail cameras will be placed in 30-40 wood duck boxes by attaching the cameras to the top of the nest boxes in February/early-March 2023 and again in 2024. We will be placing half of the cameras in boxes with high success rates and half in boxes with low success rates based on data that has been collected by The Kentucky Department of Natural Resources. We will monitor the nests until the birds have fledged and determine nest success, nest productivity, and nest parasitism rates.