

Assessing recovery opportunities for red-cockaded woodpeckers on private lands in eastern North Carolina

The red-cockaded woodpecker (RCW) is a federally listed endangered species inhabiting the open pine forests of the southeastern United States from Virginia and west to Texas. The primary habitat of the RCW—the longleaf pine ecosystem—has been reduced since European settlement to approximately three percent of its original expanse. This reduction in suitable habitat led to the listing of the RCW as endangered in 1970, and it received the protection of the Endangered Species Act (ESA) with the act's passage in 1973.

At the time of listing, the species had declined to an estimated 4,694 known clusters in widely scattered, isolated and declining populations. As of 2006, about 6,105 known active clusters remained.

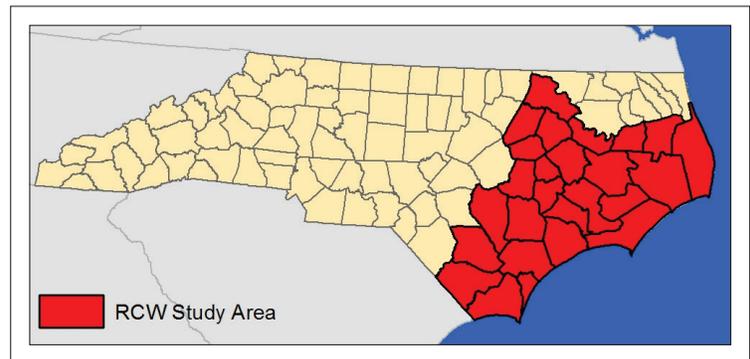
Most recovery and management efforts for RCW in eastern North Carolina are located on public lands, including U.S. Department of Defense (DoD) lands. Recovery efforts on DoD lands often limit the military's ability to train and maintain mission readiness. To meet recovery goals for the RCW and

increase training flexibility for DoD, RCW management efforts that are focused on private lands are key to the future of the species' recovery and to ensuring training needs on DoD lands are met. However, RCW recovery on private lands has not been fully explored or organized. With sponsorship from U.S. Marine Corps (USMC) Installations East, the Texas A&M Institute of Renewable Natural Resources (IRNR) and North Carolina State University (NCSU) have partnered to conduct a comprehensive study to assess opportunities for RCW recovery on private lands in eastern North Carolina.

Objectives

NCSU

- Survey private lands to identify and map existing RCW clusters within an 11-county area neighboring Marine Corps Base Camp Lejeune and the Onslow Bight Landscape



- Identify future recruitment stands within 25 counties in eastern North Carolina
- Perform a cost-benefit analysis for RCW recovery on private lands, including assessing economic incentives for landowners to develop suitable habitat through timber management practices and determining the cost of future management to develop recruitment stands

IRNR

- Provide support to guide RCW survey efforts by analyzing various land cover and forest structure characteristics to determine suitable RCW habitat
- Produce a map-based model showing different recovery scenarios by incorporating NCSU analyses, including RCW habitat, landowner attitudes and behavior and cost-benefit analysis, to guide future recovery efforts on private lands within the study area

Outcomes

These efforts will lead to an increased knowledge of RCW distribution and abundance on private lands. The development of economic incentives for private landowners to restore and conserve RCW habitat will significantly enhance the long-term recovery outlook for the species. As opportunities for RCW recovery are identified on private lands, the military can work with willing landowners to help shift some of the military's obligation to private lands, thus ensuring future training flexibility.

