

Scope of Work

PROJECT TITLE: DEMOGRAPHIC AND POPULATION RESPONSE OF RED-COCKADED WOODPECKERS ON MARINE CORPS BASE CAMP LEJEUNE, NC TO A BASEWIDE MANAGEMENT PLAN, 2024-2030

Background

The red-cockaded woodpecker (RCW; *Picoides borealis*) is a federally listed endangered species that is endemic to open pine woodlands and savannahs of the southeastern United States. Marine Corps Base Camp Lejeune (MCBCL) became one of the first Department of Defense installations to enter in consultation with the U.S. Fish and Wildlife Service regarding the protection and management of the RCW. The goal of the program is to establish a healthy RCW population with no restriction on training activities. As the result of implementing a basewide management plan for this species over the last 25years, RCW populations have been steadily increasing at Camp Lejeune.

The proposed project represents implementing management actions, population monitoring and habitat data collection on RCWs at MCBCL. This research will assist MCBCL in implementing its basewide management plan for the woodpecker and assist with evaluating how various management actions are affecting the population of this species.

Services Requested:

Base Year

Task 1. Implementing Management Actions

The RCW is a cooperatively breeding species that lives in groups with advance social structure. A group may consist of a breeding pair and perhaps one or more offspring helpers that are usually males. The group maintains a cluster of cavity trees used for roosting and breeding. The cooperator shall evaluate all recruitment clusters trees (if unoccupied at the end of the breeding season) for occupancy at the beginning (i.e., April) of the 2025 breeding season. If occupied, they will be subject to standard monitoring procedures (see Population Monitoring below). If unoccupied, the cooperator will check them for occupancy again at the end of the breeding season (i.e., July 2025).

If the number of unoccupied recruitment clusters at the end of the breeding season is fewer than 10% of active clusters, the cooperator will construct new recruitment clusters to raise the total number of unoccupied recruitment clusters to 10% of active clusters, which is likely to be 12-13 initially. Any new recruitment clusters will be constructed following the breeding season in locations approved by MCBCL staff. To create new recruitment clusters, the cooperator will create four artificial cavities in living pine trees using the Copeyon drilling technique or by installing cavity insert boxes. Recruitment clusters shall be constructed during the winter, i.e. November-February. Newly constructed recruitment clusters will be checked for occupancy

following the protocol described above, beginning with the first breeding season after they are constructed.

The cooperators shall visit all known RCW cavity trees on the base in April 2025, and data on activity, number of high quality cavities, and the number of unenlarged cavities recorded. New excavations (starts) will be located at this time, as well as during group follows in May-August, which is the season in which RCWs do most of their excavation. Global Positioning System (GPS) locations will be taken for all new trees, and added to the existing Geographical Information System (GIS) cavity tree data layer maintained by MCBCL. A complete inventory of cavity trees and their current status will be maintained by the cooperators.

The cooperators will construct cavities (using the techniques described above) in clusters with fewer than four high quality cavities, and cavity restrictors will be placed on existing cavities in clusters with fewer than four unenlarged cavities, so that all clusters have at least four unenlarged, high quality cavities. This work shall be conducted during November-February, beginning in the winter of 2024-2025. The cooperators shall also check the few remaining insert cavities on MCBCL and any that are no longer appropriate for use by RCW will be replaced with new cavities (preferably drilled), or repaired, if possible.

Task 2. Population Monitoring

The cooperators shall visit all 156 known RCW clusters on MCBCL in April 2025 and determine the activity status of each. Clusters will be classified into the following status categories: inactive; occupied by a breeding group; occupied by a solitary male; and captured (used for roosting by a bird from a group whose primary residence is another cluster). Determination of cluster status will be based on initial inspection of cavity trees and active clusters, which will separate inactive clusters from the remaining categories, and identification of adults as described below, during the breeding season. These protocols follow the latest revision of the USFWS RCW Recovery Plan.

The cooperators shall check all active clusters for breeding activity from late April until there are two consecutive weeks with no new nests (typically late June – early July). Active trees will be visited every 7–9 days to check for the presence of a nest. The cooperators shall check for nests by tapping on active trees to flush adults, and inspecting cavities with a Treetop Peeper. When nests are discovered, nestlings will be banded 6–10 days after hatching with an aluminum USFWS band and a unique combination of color bands. The cooperators shall remove nestlings from cavities using the noosing technique described in the RCW Recovery Plan, and the group will be followed after fledging to determine (by reading color bands) which of the banded young fledged.

The cooperators shall identify all RCWs on the base from colored bands (as described above) each breeding season beginning in 2025. The identity and social status of all group members will be determined by following groups or counting individuals coming to roost in the evening. Group size and group composition will be recorded, assigning status to each individual according to the criteria published in 1988 (Walters et al. 1988, *Ethology* 78:275-305). Any adult RCWs

not banded shall be captured and marked with USFWS bands and auxiliary bands that will permit subsequent visual identification of individuals. Adults will be captured by flushing them from their roost cavities into a net on the end of an extendable pole, at dusk or dawn. Capturing of adults and identification of individuals shall continue through the fall months (i.e., through November or occasionally early December).

The cooperator shall survey for unknown clusters three times throughout the year that have formed through budding or pioneering whenever population monitoring reveals indicators of new, unknown clusters, such as territorial conflicts in an area where none occurred previously, or the repeated appearance of unbanded birds in a particular area. Any clusters discovered will be included in all tasks described above.

The cooperator shall enter all monitoring data at least monthly into MCBCL's RCW database, beginning with the first month of the study.

Option Year 1

The cooperator shall conduct Tasks 1 and 2 listed above.

Option Year 2

The cooperator shall conduct Tasks 1 and 2 of the base year.

Option Year 3

The cooperator shall conduct Tasks 1 and 2 of the base year.

Option Year 4

The cooperator shall conduct Tasks 1 and 2 of the base year.

Period of Performance:

The period of performance for this Cooperative Agreement will be 12 months from award date. Subject to the availability of funds and the requirements of the Anti-Deficiency Act (31 U.S.C. § 1341), the Navy may at its sole option exercise up to four individual (12 month) option years for follow-on work to the successful Recipient(s).

Meeting and Deliverables

A kickoff teleconference between the cooperator and MCB Camp Lejeune staff shall take place following the award of the cooperative agreement. The purpose of the teleconference is to discuss any questions the cooperator may have regarding the tasks, sampling protocol, explain base access and security requirements and discuss other pertinent information which could have

a bearing on the work to be performed. Three additional teleconferences may take place during the 12-month period of performance.

Annual Report - The cooperator shall deliver a completed U.S. Fish and Wildlife Service Regional Annual RCW Property Data Report by 30 November 2025. In addition. The cooperator shall submit an annual summary report of all management actions performed.

Responsibility of the Government:

Substantial involvement is expected between the Navy and nonfederal partner when carrying out the activities specified in the scope of work and will include activities such as the Navy's involvement the development of study methodology, data gathering and analysis; review of work plans, reports and all deliverables; providing staff time to oversee and participate in the project.

1. Shall provide an Explosive Ordnance Disposal (EOD) escort in areas of the installation it is required, such as the G-10 impact area where all or parts of 18 RCW clusters are located. It is estimated that 25 days of EOD escort time will be required.
2. Shall provide previous collected data on RCWs on MCBCL
3. Staff assistance with field surveys and field data collection
4. Shall review and provide comments on the submitted data and documentation upon completion of all stated work.

Responsibility of the Cooperator:

1. Shall participate in a kick-off teleconference within 30 days of award to discuss protocols, scheduling, and data and report format.
2. Shall conduct the study as discussed in the scope of work.
3. Shall visit the designated area as often as necessary and within the limits stated above to accomplish the objectives of this project.
4. Shall comply with all site security and access rules, regulations, requirements, and day-to-day operational changes thereto.
5. Shall provide all transportation, meals, and lodging for himself/herself and his/her personnel and all equipment necessary to complete the work unless otherwise noted in the Scope.
6. Shall work closely with the installation natural resource manager and technical representative in planning and carrying out field investigations.
7. Shall employ appropriate Quality Assurance/Quality Control standards to ensure that data is correct, accurate and complete.
8. Comply with all Occupational Safety and Health Administration (OSHA) requirements. It is the Cooperator's responsibility to conduct all field activities in a manner that ensures the training and safety of the field personnel and avoids damage to vehicles and property. The Navy is not responsible for any Cooperator injuries during the time of this project.
9. To obtain all applicable permits and licensing in accordance with local, state, and federal laws and regulations necessary to perform required surveys.