



ARTHUR CARHART NATIONAL WILDERNESS TRAINING CENTER

DRAFT MINIMUM REQUIREMENTS DECISION GUIDE

WORKSHEET

Red-cockaded Woodpecker Monitoring within the Okefenokee Wilderness Area

“ . . . except as necessary to meet minimum requirements for the administration of the area for the purpose of this Act...”

– The Wilderness Act, 1964

Please refer to the accompanying *MRDG Instructions* [click here](#) for filling out this guide. The spaces in the worksheets will expand as necessary as you enter your response.

Step 1: Determine if it is necessary to take action.

Description: Briefly describe the situation that may prompt action.

Okefenokee NWR is defined as a part of the Osceola/Okefenokee primary core population for recovery according to the Red-cockaded Woodpecker Recovery Plan. The recovery plan requires that populations with less than 250 potential breeding groups be monitored and the management agency will provide an annual status report to the RCW coordinator. The endangered red-cockaded woodpecker (RCW) at Okefenokee NWR occurs on upland pine habitats. The goal for the number of RCW family groups on Okefenokee NWR is 87. The refuge currently (2009) has a total of 90 RCW clusters (potential sites with cavities). Forty-five of these (50%) are active clusters with 23 located on five islands within the Okefenokee Wilderness Area. One additional island has evidence of past RCW activity. Spatial distribution of RCW clusters on the refuge indicate that groups occur in four separate populations.

The wilderness island RCW groups make up approximately 60% of the total population on the refuge. Due to the small population size and fragmentation of suitable habitat, these groups are vulnerable to environmental changes. Productivity of RCW groups and other life history information from these interior island populations are poorly understood. The spatial arrangement of islands within the swamp, with unsuitable RCW habitat between most of them, may limit the movement of individuals between islands and/or to suitable habitat on the refuge perimeter. To assess their status in relation to fire management and natural events and to satisfy the refuge's responsibility in recovery of this endangered species, it becomes critical that monitoring of these island populations is continued on a consistent basis. The need for monitoring is identified in the refuge's CCP as stated in the following goal, objective and strategies:

Wildlife Goal: Promote and provide high quality habitat and protection for endangered and threatened species and conserve the natural diversity, abundance, and ecological function of native flora and fauna on and off refuge lands.

Wildlife Objective 1. Protect and maintain the threatened and endangered species populations, expanding their populations where possible, and enhancing the habitat on the refuge by working with adjacent landowners. Encourage other land managers in the area to promote appropriate habitat for threatened and endangered species to create a larger gene pool, increase opportunities for survival within the ecosystem, and restore a piece of the area's natural heritage.

Wildlife Strategy 1.4. Survey the status of RCW clusters on wilderness islands every other year during the breeding season to assess activity, suitability of cavities, and habitat conditions. Complete a summary report of conditions and recommendations.

Wildlife Strategy 1.6. Evaluate the need for a population viability model to assess the RCW populations at Okefenokee NWR and in cooperation with the Regional RCW Coordinator, identify the refuge's contribution to the regional resource.

Team members from the biological program review in 2001 pointed to the fragmentation of habitat units on the refuge as a major factor limiting the long-term viability of RCW's on Okefenokee NWR. Continuing to collect data at least every two years is necessary to supplement existing databases and provide consistency in long-term datasets for future management and modeling efforts.

Access to the remote wilderness islands to monitor the refuge's RCW populations is limited with only one island having a maintained water trail leading to it.

A. Describe Valid Existing Rights or Special Provisions of Wilderness Legislation

Are there valid existing rights or is there a special provision in wilderness legislation (the Wilderness Act of 1964 or subsequent wilderness laws) that allows consideration of action involving Section 4(c) uses? Cite law and section.

Yes: No: Not Applicable:

Explain:

B. Describe Requirements of Other Legislation

Do other laws require action?

Yes: No: Not Applicable:

Explain:

Since the RCW is federally listed as endangered, the Endangered Species Act (1973) governs management of RCW populations and the lands on which they occur.

C. Describe Other Guidance

Does taking action conform to and implement relevant standards and guidelines and direction contained in agency policy, unit and wilderness management plans, species recovery plans, tribal government agreements, state and local government and interagency agreements?

Yes: No: Not Applicable:

Explain:

The RCW recovery plan requires that populations with less than 250 potential breeding groups monitor the population and provide an annual status report to the RCW coordinator. Additionally, RCW habitat management agreements with the Georgia Forestry Commission and International Paper require that the refuge monitors the status of existing groups to determine the extent of habitat use and dispersal patterns within agreement areas. Thus, monitoring the activity of RCW groups is necessary to achieve recovery goals.

D. Describe Options Outside of Wilderness

Can this situation be resolved by action outside of wilderness?

Yes: No: Not Applicable:

Explain:

RCW groups within the refuge's wilderness area comprise approximately 60 percent of the total population. Monitoring does occur outside the wilderness area on the small upland management compartments that the refuge manages. These management compartments are subject to impacts from adjacent timber lands and development and do not represent the island populations. Clusters within the wilderness are unique because they have not been manipulated except by prescribed burning operations. These island clusters are also influenced more by natural fires sweeping over the landscape.

E. Wilderness Character

How would action contribute to the preservation of wilderness character, as described by the components listed below?

Untrammeled:

Through good scientific information of these unique clusters of RCW in the wilderness, the natural dynamics of the populations can be better understood. Different limiting factors may impact the island populations and lessen the need for intensive management strategies.

Undeveloped:

See comment above.

Natural:

With the acquisition of data and the location of active clusters, the populations of RCW within the wilderness can be protected from large intense fires, helping to maintain the natural fauna within the landscape.

Outstanding opportunities for solitude or a primitive and unconfined type of recreation:

The monitoring activity is conducted on five islands that are not accessible and one that is accessible to the general public. On Billys Island, all RCW survey activity is conducted in closed areas except for hiking a half mile through a public access area. Therefore, this activity will have minor impacts on the solitude a visitor to Billys Island may experience.

Other unique components that reflect the character of this wilderness:

An essential characteristic of the Okefenokee Wilderness is the abundance and diversity of wildlife. This action will assist the refuge in early detection of environmental changes that may jeopardize the health of the RCW and associated wildlife living within the wilderness.

F. Describe Effects to the Public Purposes of Wilderness

How would action support the public purposes for wilderness (as stated in Section 4(b) of the Wilderness Act) of recreation, scenic, scientific, education, conservation, and historical use?

Explain:

Monitoring the status of the refuge’s wilderness RCW would support the Service’s conservation efforts for this species as well as the public’s wilderness purpose of conservation and scientific use. Maintaining healthy populations of native species is one of the essential characteristics of the Okefenokee Wilderness. The knowledge gained through monitoring assists in recognizing imbalances within the system. The benefits of wilderness can be expressed through the use of this data during educational programs.

Step 1 Decision: Is it necessary to take action?

Yes: No: Not Applicable:

Explain:

Based on the importance of RCW’s within the Okefenokee wilderness area and the Service’s responsibility to manage endangered species on federal lands, we believe that monitoring the status of this segment of the population is important to achieve recovery goals.

If action is necessary, proceed to Step 2 to determine the minimum tool for action.

Step 2: Determine the minimum tool.

Description of Alternative Actions

For each alternative, describe what methods and techniques will be used, when the action will take place, where the action will take place, what mitigation measures are necessary, and the general effects to wilderness character.

Alternative # 1 Access Billys Island by motorboat and monitor the RCW each year and access other wilderness islands that have or have previously supported RCW by helicopter and monitor every other year.

Description:

With a maintained water trail for motorized boats to Billys Island, this island would be accessed by boat each year. Crews can transport equipment to the north end of the island via boat and carry monitoring equipment and supplies to the cluster sites. To minimize the presence of people within the wilderness, the other islands that have or have previously supported RCW (Honey, Bugaboo, Blackjack, Mitchell and Number One Islands) would be monitored every other year. Helicopter flights to transport equipment (cavity monitoring tools and/or camping gear) and monitoring crews to and from the islands are the only method of access. Status of RCW colonies would be determined during the breeding season (March-June) to gain the greatest amount of information to compare between years. Evaluating activity of existing cavities, searching for new cavities, and evaluating habitat conditions would be incorporated into the monitoring visits. Trees would be repainted with a white band each visit. This white band assists crews in locating them the next time and during emergencies when there may be crews unfamiliar with the landscape. Current GIS technology can get an individual to the general area of the trees but specific locations of some trees are hard to detect without identifying bands. One to four days would be spent on each island during monitoring years.

Covered in an MRDG on RCW tree pre-fire maintenance, these islands are visited each year prior to the breeding season. Only high priority trees are visited.

Effects:

Biological and Physical Resource

Status changes along with environmental changes can be evaluated more effectively when monitored consistently. Under this alternative, we would conduct a yearly survey on Billys Island to obtain immediate feedback on our management practices and impacts of natural events and a survey on Honey, Bugaboo, Blackjack, Mitchell, and Number One Islands every other year would be adequate to identify status changes in relation to an event and access habitat conditions for management planning between prescribed fire cycles. Tree prep is generally accomplished when the birds are away from the clusters foraging. Monitoring during the breeding season would increase the chances of disturbing birds that may be on a nest. Disturbance is minimized by using the Tree Top Peeper (camera on an extended pole) to examine cavities. If a bird is detected, the peeper is removed as soon as the bird is identified. The white band painted around each RCW tree impacts the black bears because it is common to find bear claw marks through this area of the tree trunk.

Social and Experiential Resource

Helicopter flights over the swamp may be detected by visitors. Flight paths to all the islands mentioned in this MRDG cross motorboat trails. To minimize the effect to visitor solitude and to wildlife, flight altitude would be above 700 ft. over wilderness trails/shelters.

Heritage and Cultural Resource

There are no historical or cultural sites that would be disturbed during this activity. If it is necessary to camp, camping activities would be at least 100 feet from an Indian mound.

Maintaining Contrast and Unimpaired Character

The helicopter is a short-term intrusion into the wilderness solitude and naturalness. Although the staff traverses the islands by foot, the presence of humans contrasts with the normal inhabitants and may be more disturbing to the wildlife than to those animals that are exposed to humans on a regular basis.

Special Provisions

The monitoring of this population contributes to the recovery efforts for this endangered species and gives feedback on management strategies the refuge implemented.

Safety of Visitors, Personnel, and Contractors and Work Methods

Travel by helicopter can be dangerous. Passengers are briefed on safety procedures prior to every flight. All steps to prevent accidents would be taken for these surveys. Good communication is essential for safety when conducting these surveys. Heat related illnesses are also a major factor during these surveys.

Economic and Time Constraints

Helicopter flight time is expensive. Flights are arranged to minimize the number of trips needed and maximize the benefit for data collection. Jon boat travel to Billys Island would reduce overall cost. Camping on the islands adds considerably to the logistics and may not actually save on the number of trips to the islands. Staying on the islands overnight would be considered when arranging trips and the number of crews per day. These surveys are conducted during the breeding season to assess reproductive potential at a consistent time and because activity at RCW cavities is more noticeable.

Additional Wilderness-specific Comparison Criteria

Established water trails do not provide access to any of the islands that have RCW except Billys Island. Thick scrub-shrub vegetation limits the ground access to these islands. The Wilderness legislation does not provide the authorization to create additional trails.

Alternative # 2. Access Billys Island by motorboat and monitor the RCW each year. Use the data as an indicator of the status of RCW on the other wilderness islands.

Description:

Travel to Billys Island via motorboat and monitor RCW status for activity, suitability of cavities, and habitat conditions each year during the breeding season. The RCW tree bands would be repainted each year to facilitate locating them the next visit and during emergency incidents when crews may not be familiar with the landscape. Use this information as an indicator of what the RCW status is on other wilderness islands.

Effects:**Biological and Physical Resource**

A sample of Billys Island would not be representative of all the islands since each island has different vegetation structure and composition. Also, natural events impact the islands in different ways as they travel over the landscape. The RCW populations on the islands are small and vulnerable to decline. They are not considered one population due to the landscape fragmentation and the distance apart.

Social and Experiential Resource

There would be no helicopter flights over the swamp to disturb visitation and motorboat travel by the general public to Billys Island is common. Refuge crews would come into contact with visitors at the north end of Billys Island.

Heritage and Cultural Resource

No historical or cultural resources would be disturbed on Billys Island to accomplish this activity. Artifacts are observed from the turpentine operations that occurred on the island.

Maintaining Contrast and Unimpaired Character

Human presence on the island would contrast with the presence of natural inhabitants on the island and may cause more disturbance for wildlife species. Painting rings on the RCW trees for increased recognition by crews leaves a human presence to the landscape. These rings would be minimized in width.

Special Provisions

Without an accurate status assessment of the island populations, the refuge's contribution to the recovery efforts would be questionable. Because of the variability between forest stands on wilderness islands, RCW reproduction, survival, and dispersal are also likely to vary considerably between islands. This variability does not support the concept of representing all the islands' RCW by the findings on Billys Island.

Safety of Visitors, Personnel, and Contractors and Work Methods

Travel by motorboat has fewer safety concerns than by helicopter. Heat would be a major factor for the crew to consider when traveling over Billys Island.

Economic and Time Constraints

Survey costs and the time required to complete the work would be greatly reduced under this alternative. The survey would be conducted during the breeding season, which would maximize the data collected. However, the value of the data generated from a single-island survey would also be less.

Additional Wilderness-specific Comparison Criteria

The north end of Billys Island is open to the public to view the area that comprised the town in the past. Beyond this, the island is closed.

Step 2 Decision: What is the Minimum Tool?

The selected alternative is: # 1 Access Billys Island by motorboat and monitor the RCW each year and access other wilderness islands that have or have previously supported RCW by helicopter and monitor every other year.

Describe the rationale for selecting this alternative:

Alternative 1 allows refuge biological staff to develop a complete population estimate every other year and determine long-term trends for both wilderness and non-wilderness clusters. It is sensitive to disturbances and population changes. Due to the dynamic nature of each island population, surveys of RCW clusters on Billys Island only would not represent an accurate picture of other island cluster activity. Attempting to apply the results from surveys on Billys Island to other island populations would severely jeopardize the integrity of survey databases. A thorough survey of the refuges RCW populations is also necessary to satisfy requirements mandated for this primary core population in the RCW Recovery Plan.

Describe any monitoring and reporting requirements:

Refuge staff completes wilderness logs on their activities for all trips into the wilderness area. A standard form was developed to facilitate reporting and attempt to collect information that can be used to assess resource impacts from designated activities. Additionally, an annual RCW report would summarize the findings on the islands. Any comments on management of the islands and the RCW populations would be incorporated into "Notes to the File" and distributed to refuge staff for discussion at a retreat. Future management would be incorporated into the annual habitat work plan.

Please check any Wilderness Act Section 4(c) uses approved in this alternative:

- | | |
|--|--|
| <input type="checkbox"/> mechanical transport | <input checked="" type="checkbox"/> aircraft over the wilderness |
| <input type="checkbox"/> motorized equipment | <input checked="" type="checkbox"/> landing of aircraft |
| <input type="checkbox"/> motor vehicles | <input type="checkbox"/> temporary road |
| <input checked="" type="checkbox"/> motorboats | <input type="checkbox"/> structure or installation |
| <input type="checkbox"/> other _____ | |

Be sure to record and report any authorizations of Wilderness Act Section 4(c) uses according to agency procedures.

Approvals	Signature	Name	Position	Date
Prepared by:		Dean Easton Sara Aicher	Biologist Biologist	7-22-05
Recommended:				
Recommended:				
Approved by:				