



2017 FIRE CONGRESS
Research Highlight



Aligning Endangered Species Management with Ecosystem Restoration: Manager Perspectives on Red-cockaded Woodpecker Management

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MAIN QUESTIONS OR ISSUES THAT YOU ADDRESSED

Managing for endangered species within ecosystems that have been altered by past human action (e.g. fire suppression) prompts the question of how restoration management objectives may overlap or conflict with species population recovery efforts. Thus, we ask the following questions: 1. How have population recovery efforts associated with red-cockaded woodpeckers (*Leuconotopicus borealis*), an endangered species dependent on fire in southeastern pine (*Pinus* spp.) ecosystems, developed since the species was listed under the Endangered Species Act in 1973? 2. How do managers' goals and objects for red-cockaded woodpecker management align or conflict with other resource management priorities (e.g. timber production, management for other species)?

LOCATION AND ECOSYSTEM INVESTIGATED

Primarily, longleaf pine (*Pinus palustris*) ecosystems in the Southeastern United States.

KEY FINDINGS OF YOUR RESEARCH

1. Red-cockaded woodpecker habitat management was largely viewed as compatible with other resource management objectives.
2. Management efforts for the red-cockaded woodpecker have evolved from an emphasis on stabilizing population loss towards focusing more broadly on habitat management through longleaf pine restoration.
3. Linking conservation efforts for red-cockaded woodpeckers to longleaf pine ecosystem restoration has been important in sustaining management efforts.
4. Conflict identified by red-cockaded woodpecker professionals was centered on the need to provide or maintain red-cockaded woodpecker foraging habitat in the near-term and this (sometimes) limits longleaf pine restoration efforts (i.e. it may not be possible to convert a stand of offsite pine species to longleaf pine if that stand is designated as foraging habitat).

HOW DID YOU ANSWER THE MAIN QUESTIONS OR INFORM THE ISSUES?

We conducted 32 semi-structured interviews with natural resource professionals involved in red-cockaded woodpecker management on public lands. Professionals were sampled from across the coastal plain portion of the red-cockaded woodpecker range and across multiple land management agencies involved in red-cockaded woodpecker management.

HOW MIGHT/WILL IT INFLUENCE FIRE MANAGEMENT DECISIONS OR PRACTICES?

1. The findings from this study may also be applicable to other cases of species at risk that are threatened by a disruption of natural processes, especially fire.
2. In this particular case, longleaf pine restoration efforts (including the use of prescribed fire) are seen as tightly linked to red-cockaded woodpecker habitat management and this appears to provide reciprocal justification for engaging in active management for both the ecosystem as a whole and the species specifically.
3. The Endangered Species Act is well equipped to address immediate threats to listed species. However, justifying continued management for a single species once it is no longer under federal protection could be difficult. When developing strategies for managing species at risk in fire-adapted ecosystems long-term, connecting species recovery to ecosystem restoration efforts (e.g. restoring fire regimes) may help to support continued prioritization of habitat management efforts.

WHO IS THE MAIN END-USER OF YOUR RESEARCH?

The findings from this research may be of interest to natural resource professionals making decisions regarding endangered species on public lands as well as individuals administering the Endangered Species Act.

CONGRESS SESSION

Case Studies and Lessons Learned