



Piedmont National Wildlife Refuge Manages RCW Habitat with Prescribed Fire

The National Cohesive Wildland Fire Management Strategy is a national collaborative effort to bring a broad cross-section of stakeholders together to address wildland fire management challenges. The Strategy directs wildland fire planning activities and has three primary goals: restore and maintain landscapes, develop Fire-Adapted Communities, and improve wildfire response.

Activity	Impact
# bird species recorded at refuge	200
Primary bird species managed at refuge	Red-cockaded woodpecker (RCW) & Northern bobwhite quail
# active RCW clusters (2015)	59
# acres burned at refuge	34,000
# acres on 2 year/3 year rotation	5,000/29,000
Average acres burned between 2006 & 2015	9,287
Predominant species managed at refuge	Loblolly & shortleaf pine

Piedmont National Wildlife Refuge (NWR), located on 35,000 acres in central Georgia, was established in 1939 as a refuge and breeding ground for birds and other wildlife. An initial goal of the Piedmont NWR was demonstrating that wildlife and habitat could be restored on highly eroded and disturbed landscapes using good forest management practices. Once nearly devoid of forests and wildlife, over 75 years later the Piedmont NWR is entirely reforested and hosts abundant wildlife, including waterways for migrating birds, productive wetland areas from beaver ponds, and opportunities for hunting. Mammals, birds, and even butterflies are all abundant at the Piedmont NWR.

Nearly 200 species of birds have been recorded at the Piedmont NWR. In the wetland areas, belted kingfishers, great blue herons, and wood ducks are present, and in open areas, bluebirds, hawks, and turkey are abundant. Forest species include brown-headed nuthatches, chickadees, flycatchers, warblers, and woodpeckers. The federally endangered Red-cockaded woodpecker (RCW) is also present at the Piedmont NWR. The RCW and the habitat it prefers (open pine woodlands

managed with prescribed fire) receives priority in refuge management. 34,000 acres are in fire management. Of that, 5,000 acres are in a 2 year rotation and 29,000 are in a 3 year rotation. The two year areas are broken into smaller units for Bobwhite quail management.

Approximately 2/3 of the refuge is a mix of loblolly and shortleaf pine with the remainder in upland and bottomland hardwoods. RCW prefers nesting in large pines, notably those affected by heart rot. RCW also prefers a minimal forest midstory. Since pine trees are eventually out-shaded by hardwoods without some sort of disturbance, like fire or thinning, prescribed fire can be used to maintain the landscape preferred by RCW. A dual benefit of regular prescribed fire is reducing wildfire risk. At the Piedmont NWR, desired RCW conditions were achieved using prescribed fire every 2-3 years. The refuge burned an average of 9,287 acres between years 2006 and 2015. Piedmont NWR has managed RCW since the 1960s, but began officially monitoring the species in 1983. By year 2015, the reported number of active clusters at the refuge was 59.

Smoke is the greatest concern regarding

Success stories highlight regional wildland fire accomplishments that support implementation of the National Cohesive Wildland Fire Management Strategy in the Southeast. The stories demonstrate how the Southeast is improving its "fire resiliency" through technology, education and outreach, forest management, collaboration, and more. Success stories also serve as a model for other communities to follow.

RCW habitat management at Piedmont NWR, especially as it relates to human safety and air quality. In 2007, several prescribed burns from the Piedmont NWR and Oconee National Forest resulted in significant particulate exceedances in the Atlanta metro area. The lesson learned from this experience was the value of coordinating burns. The refuge now coordinates with the Oconee National Forest on fire timing, frequency, size, and spatial distribution to avoid smoke management concerns.



Prescribed Fire at the Refuge. Credit: US Fish and Wildlife Service



RCW Habitat at the Refuge. Credit: US Fish and Wildlife Service



RCW management at Piedmont NWR. Credit: US Fish and Wildlife Service

Additional Information:

Piedmont National Wildlife Refuge: <http://www.fws.gov/piedmont/>

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