GLADE/WOODLAND RESTORATION IN THE ST. FRANCIS MOUNTAIN BIRD CONSERVATION AREA

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EXTENDED ABSTRACT

The Missouri Department of Conservation (MDC), the Missouri Department of Natural Resources, the U.S. Forest Service, and American Bird Conservancy, share goals to restore and manage high quality glade, savanna, and woodland habitats within the Saint Francis Bird Conservation Area. The partnership endeavors to maintain and enhance an ecosystem with native glade and pine woodland components across a large landscape in which private and public land management work together to contribute to the overall habitat goals.

The primary purpose of this project is to increase habitat available to grass-shrub bird species. Species targeted have declined significantly since the inception (1966) of the annual North American Breeding Bird Survey. A secondary goal of the project is to develop contractors capable of delivering prescribed fire management in the Ozark Mountains of southeastern Missouri by utilizing grant dollars. The project also will increase landowner awareness and foster cooperation through outreach and technical assistance with the public and through interagency partner planning and coordination.

The St. Francis Mountains Bird Conservation Area (SFBCA), established in 2003, lies in the eastern Ozarks of southeastern Missouri and located within an ecological subsection known as the St. Francois Knobs and Basins (Fig. 1). It comprises portions of St. Francois, Madison, and Iron Counties and minor portions of Washington, Reynolds, Wayne, Bollinger. and Ste. Genevieve counties. The SFBCA supports a diverse array of habitat types, including igneous glades, oak savannas, and oak and oak-pine woodlands.

This project seeks to secure and expand declining bird species within the St. Francois mountain region through the restoration of glade, woodland, and grass habitats on public and private lands. Partner agency staff and resources, coupled with grant dollars, were used to implement the management plan.

Key private land parcels were identified and prioritized. Highest priority was placed on cooperative public-private land restoration. The second priority was private land restoration adjacent to or nearby publicly-owned glade complexes. Private lands were selected by MDC cooperators or by partner agency referrals and by landowner interest. Three contracts of 800 to 1200 acres with an average of 10 units per package were developed and implemented with grant dollars with mixed success.

In an attempt to ensure long-term success of the restoration units, federal costshare will be utilized to implement follow-up burns.

Facilitation of public burn units was accomplished through contracted snag felling and line construction to best complement limited labor.

Partners met formally on an annual basis to better coordinate restoration work. Several cooperative projects have been identified.

During the granting period, more than 5000 acres of habitat were treated using prescribed fire within the SFBCA (>2200 acres on private land). Approximately 350 acres (>110 acres on private land) of eastern red cedar were removed from habitats within the SFBCA. Twelve miles of fireline was contracted. Eight workshops were conducted by MDC and other project partners within the SFBCA. Increased opportunity for cooperation was created via interagency planning.

Figure 1.—Project Area

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We have achieved success in habitat improvements, but maybe equally important is the continued development of fire contractors and administrative mechanisms to have contractors conduct prescribed burns on large private parcels. It will be necessary to coordinate several burn units each spring (1000 acres or more) to ensure adequate acreage to continue to attract contractors capable of conducting large woodland burns. Coordination of multiple-ownership restoration involves communication between private landowners, natural resource agencies, and contactors. This is especially evident in situations where large tracts of public land encompass small private parcels. At times, private inheld parcels preclude conducting landscape-level burn units. It is necessary to target these key inholdings and actively assist with facilitation of the burn between landowner, agency, and contractor to ensure successful restoration efforts. We found that contracting woodland fire units cost at least $1000 to $1200 per day. For this reason, we selected units over 30 acres in size. More contractors are needed. Timber stand improvement allows fire contractors crews to stay busy while in the area and minimize down time when weather is not conducive to burning or line construction. Private land-burn costs averaged $45/acre for a burn plan, line installed, and a burn conducted. Costs averaged $30/acre for woodland burns when the lines were installed and a plan provided to the contractor. Follow-up burns are ongoing and typically occur 2 to 3 years after the initial prescribed fire and periodically thereafter.

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