

Project Highlight – SD State Wildlife Grant

Project Type Research

Title Evaluation of timber harvest on nongame bird abundance and diversity in Custer State Park, South Dakota

In a nutshell Timber harvesting is a common land use in the ponderosa pine forests of the Black Hills. This project was designed to monitor impacts of timber harvest treatments on nongame bird species by monitoring bird and vegetation at selected transects pre- and post-treatment.

Relevant Species of Greatest Conservation Need

- Northern Goshawk (*Accipiter gentilis*)
- American Three-toed Woodpecker (*Picoides tridactylus*)
- Black-backed Woodpecker (*Picoides arcticus*)
- White-winged Junco (*Junco hyemalis aikenii*)

Relevant Habitats ponderosa pine forest

Purpose

- Compare nongame bird abundance and diversity before and after timber sale treatments
- Determine the effects of timber harvest on abundance of sensitive or species of greatest conservation need
- Quantify macro- and micro-habitat characteristics used by nongame birds in a ponderosa pine ecosystem

Timeframe October 2008 – May 2013

Location Custer State Park, Black Hills, South Dakota

Summary or Important Findings

- Bird species, such as Plumbeous Vireo, that preferred more open forest stands reacted positively to thinning, while those that preferred more dense forests, such as Brown Creeper, responded negatively
- Species richness and evenness were largely unchanged by the timber thinning treatments in this study

Best contact person Dr. Kent Jensen, SDSU or Dr. Chad Lehman, SDGFP

More Information

Panning, J., K. C. Jensen, and C. P. Lehman. 2013. Evaluation of timber harvest on nongame bird abundance and diversity in Custer State Park, South Dakota. Final Report to South Dakota Game, Fish and Parks for T-2-R-1. 35 pp.