

Birds and Burns Network
Progress Report 2002

Location: Gila National Forest **State:** NM

Purpose: See Joint Fire Sciences Program, Proposal # 01-1-3-25: *Prescribed fire strategies to restore wildlife habitat in ponderosa pine forests of the Interior West (Saab, Kotliar, Block)*

Partners:

- U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Research Work Unit Number RMRS-4251.
- University of Arizona, School of Renewable Natural Resources, Department of Wildlife and Fisheries Science.

Study Area Description: The study area is located about 30 km southwest of Reserve, New Mexico on the Reserve Ranger District of the Gila National Forest. Elevations on the site range from 2,300 m to 2,500 m. Both control and treatment units are primarily located on steep slopes but include some open areas where the slopes level out into a large grassland park. The vegetation is dominated by ponderosa pine (*Pinus ponderosa*) and gambel oak (*Quercus gambelii*). Other common trees are alligator juniper (*Juniperus deppeana*) and pinyon pine (*Pinus edulis*) at lower elevations and Douglas-fir (*Pseudotsuga menziesii*) at higher elevations. The understory on both units is dominated by shrubby gambel oak. Perennial bunchgrass species including Arizona fescue (*Festuca arizonica*) and blue gramma (*Bouteloua gracilis*) occur in scattered clumps throughout the understory and dominate open grassland patches. The study area has a history of timber harvest and livestock grazing. The most recent harvest took place in the mid 1980's, and targeted large diameter ponderosa pine. Pre-commercial thinning followed the timber harvest and a low intensity prescribed burn was conducted to remove woody debris. The prescribed burn was very patchy, however, and many downed, pole-sized trees and stumps remain. Wildfire in the area has been actively suppressed since the late 1800's. The study area is part of a current grazing allotment and is grazed seasonally.

Methods: Methods generally follow those outlined in the Joint Fire Sciences Program, Proposal # 01-1-3-25: *Prescribed fire strategies to restore wildlife habitat in ponderosa pine forests of the Interior West (Saab, Kotliar, Block)*

Preliminary Results and Discussion:

Nests

Species Code	Nests monitored	Nests fledged
NOFL	7	5?
HAWO	1	1
WEBL	8	4?

Note: most of the nests not included in the Nests Fledged category were probable fledges that could be not confirmed. There were no incidences of confirmed failure or predation.

Point Counts:

The New Mexico site consists of one control unit and one treatment unit. Both units are approximately 250 ha and each unit has 21 closed canopy point count stations and 4 open canopy stations. Each station was visited three times

Bird species detected:

1. american robin (*Turdus migratorius*)
2. black-headed grosbeak (*Pheucticus melanocephalus*)
3. brown creeper (*Certhia americana*)
4. black-throated gray warbler (*dendroica nigrescens*)
5. broad-tailed hummingbird (*Selasphorus platycercus*)
6. bushtit (*Psaltriparus minimus*)
7. chipping sparrow (*Spizella passerina*)
8. common nighthawk (*Chordeiles minor*)
9. common raven (*Corvus corax*)
10. cordilleran Flycatcher (*Empidonax occidentalis*)
11. dark-eyed junco (*Junco hyemalis*)
12. downy woodpecker (*Picoides villosus*)
13. grace's warbler (*Dendroica graciae*)
14. hairy woodpecker (*Picoides villosus*)
15. hermit thrush (*Catharus guttatus*)
16. lesser goldfinch (*Carduelis psaltria*)
17. mountain chickadee (*Poecile gambeli*)
18. mourning dove (*Zenaida macroura*)
19. northern flicker (*Colaptes auratus*)
20. pinon jay (*Gymnorhinus cyanocephalus*)
21. plumbeous vireo (*Vireo plumbeus*)
22. pygmy nuthatch (*Sitta pygmaea*)
23. ruby-crowned kinglet (*Regulus calendula*)
24. red-faced warbler (*Cardellina rubrifrons*)
25. spotted towhee (*Pipilo maculatus*)
26. steller's jay (*Cyanocitta stelleri*)
27. townsend's solitaire (*Myadestes townsendi*)
28. vesper sparrow (*Pooecetes gramineus*)
29. violet-green swallow (*Tachycineta thalassina*)
30. virginia's warbler (*Vermivora virginiae*)
31. western bluebird (*Sialia mexicana*)
32. western scrub-jay (*aphelocoma californica*)
33. western tanager (*Piranga ludoviciana*)
34. western wood pewee (*Contopus sordidulus*)
35. white-breasted nuthatch (*Sitta carolinensis*)
36. yellow-rumped warbler (*Dendroica coronata*)

Vegetation:

Vegetation was measured at each of the 25 point count stations (4 open canopy and 21 closed canopy) on both the control and treatment units and at all 16 nests.

Woody vegetation by species:

1. Ponderosa Pine (*Pinus ponderosa*)
2. Gambel Oak (*Quercus gambelii*)
3. Alligator juniper (*Juniperus deppeana*)
4. Two-needle pinyon (*Pinus edulis*)
5. Douglas fir (*pseudotsuga menziesii*)
6. Arizona oak (*Quercus arizonica*)
7. Southwestern white pine (*pinus strobiformus*)
8. Gooseberry (*Ribes spp*)
9. Rabbit brush (*chrysothamnus nauseosus*)
10. Cliff-rose (*cowania mexicana*)

Note: This site was scheduled to burn fall 2002. However, due to frequent rain and wet conditions, burning has been delayed. A new date has not yet been set.