

Arizona Woodpecker (*Picooides arizonae*)

(formerly Strickland's Woodpecker)

NMPIF level: Biodiversity Conservation Concern, Level 2 (BC2)

NMPIF assessment score: 16

NM stewardship responsibility: Low

National PIF status: Watch List

New Mexico BCRs: 34

Primary breeding habitat(s): Madrean Pine-Oak Woodland, Southwest Riparian

Summary of Concern

Arizona Woodpecker is a pine-oak and sycamore riparian specialist of central and northern Mexico, extending north into southeast Arizona and southwest New Mexico. The state population is vulnerable due to its very small size and limited distribution in the Peloncillo and Animas Mountains. A primary stronghold in the Animas Mountains, Indian Creek, burned in 2006, prompting concern for the continued presence of this species in the area (N. Moore-Craig, pers. comm.).

Associated Species

Zone-tailed Hawk, Common Poorwill, Magnificent Hummingbird (BC2), Dusky-capped Flycatcher, Mexican Jay (BC2), Western Wood-Pewee, Hutton's Vireo, Bewick's Wren, Black-throated Gray Warbler (SC2), Hepatic Tanager, Spotted Towhee

Distribution

Arizona Woodpecker is largely endemic to the Sierra Madre Occidental and the central volcanic belt of central and northern Mexico. Its range extends south from the border states of Sonora and Chihuahua to Colima, Zacatecas, and Michoacán. It also extends north of border into southeast Arizona west to Baboquivari Mountains and north to Santa Catalina and Pinaleno Mountains, and to the far southwest corner of New Mexico (Monson and Phillips 1981, Johnson et al. 1999).

In New Mexico, Arizona Woodpecker is resident only in the Animas Mountains and Peloncillo Mountains in Hidalgo County (Parmeter et al. 2002).

Ecology and Habitat Requirements

Arizona Woodpecker is a species of dry, mid-elevation Madrean pine-oak habitat, and adjacent riparian woodland. It is especially dependent on the presence of evergreen oaks. In Arizona, it is strongly associated with sycamore-walnut riparian areas. Arizona Woodpeckers in New Mexico do not share the same strong association with sycamores. Habitat extends to lower-elevation oak groves and mesquite in the northern portion of the range, and to higher elevations in Mexico (Phillips et al. 1964, Winkler 1979, Johnson et al. 1999). In the Southwest, it generally occurs at lower elevations than Hairy Woodpecker and higher elevations than Ladder-backed Woodpecker.

Nesting activity begins in mid- to late-April. Nest cavities are constructed at a range of heights in dead limbs deciduous trees, typically evergreen oaks, sycamores, cottonwoods or walnuts. A single brood per season is raised. In southeast Arizona, the rate of fledgling success was relatively high. Arizona Woodpecker forages most often in oaks but also uses a range of deciduous and coniferous vegetation. Its diet is primarily insect larvae and adult insects (Johnson et al. 1999).

Conservation Status

Species Assessment

DISTRIBUTION	5
THREATS	3
GLOBAL POPULATION SIZE	4
LOCAL POPULATION TREND	3
IMPORTANCE OF NEW MEXICO TO BREEDING	1
COMBINED SCORE	16

Arizona Woodpecker is a Biodiversity Conservation Concern, Level 2 species for New Mexico, with a combined vulnerability score of 16. Arizona Woodpecker is a national PIF Watch List Species. At the continental level, it receives a maximum PIF vulnerability score of 5 for its very small distributional range, and a score 4 for population size.

Population Size

PIF estimates a species population of 200,000, less than 5% of which occurs in the United States. Size of the New Mexico population is unknown but thought to be very small, on the order of 10 pairs. This species typically occurs at low densities: 4 pairs/40 ha in oak-juniper-pine woodland in Chiricahua Mountains in southeast Arizona (Balda 1970), and 1–5 pairs/1.6 km (average 2.25) in strip censuses of pine-oak woodland in 20 mountain ranges in the southwestern U.S. and northern Mexico (Marshall 1957).

Population Trend

This species is not sampled by BBS. Both PIF and NMPIF assign a score of 3, indicating that rangewide and locally, population trends are uncertain.

Threats

Effects of human activities on this species are not well known. Habitat fragmentation in Mexico as a result of increasing rural development and lumbering may result in diminishing populations. Overdraft of groundwater and heavy grazing may be harmful to populations in the southwest United States, where studies have shown the presence of sycamores to be particularly important. A high water table is essential for sycamore seedling survival and for survival of mature trees (Bock and Bock 1985). In New Mexico, a considerable threat to woodpeckers remaining in the Animas Mountains is fire. The persistence of woodpeckers following the Indian Creek fire remains to be seen. NMPIF assigns a score of 3, indicating a moderate degree of perceived threat to breeding in New Mexico.

Management Issues and Recommendations

Management for Arizona Woodpecker in New Mexico should focus on maintaining healthy stands of pine-oak woodland in the Peloncillo and Animas ranges and, in canyon areas, sycamore-dominated riparian habitat.

NMPIF Recommendations

- Manage grazing as needed and as practicable to ensure health of riparian stands in pine-oak habitat in the southwestern mountain ranges.

Species Conservation Objectives

PIF Objectives

The PIF North American Landbird Conservation Plan places Arizona Woodpecker in the conservation action category Long-term Planning and Responsibility and sets a continental population objective of maintaining or increasing the current population over the next 30 years.

NMPIF Objectives

- Maintain or increase the current population in the Peloncillo and Animas Mountains.

Sources of Information

Balda, R. P. 1970. Effects of spring leaf-fall on composition and density of breeding birds in two southern Arizona woodlands. *Condor* 72: 325–331.

Bock, J. H., and C. E. Bock. 1985. Patterns of reproduction in Wright's sycamore. Pp. 493–494 *in* Riparian ecosystems and their management: reconciling conflicting uses (R. R. Johnson et al., tech. coord.). USDA For. Serv. Gen. Tech. Rep. RM-120, Rocky Mtn. For. and Range Exp. Stn., Ft. Collins, CO.

Johnson, R. R., L. T. Haight, and J. D. Ligon. 1999. Strickland's Woodpecker (*Picoides stricklandi*). *In* The Birds of North America, No. 474 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.

Marshall, J. T. 1957. Birds of the pine-oak woodland in southern Arizona and adjacent Mexico. *Pac. Coast Avifauna* 32.

Monson, G., and A. R. Phillips. 1981. Annotated checklist of the birds of Arizona. 2nd ed. Univ. of Arizona Press, Tucson, AZ.

Parmeter, J., B. Neville, and D. Emkalns. 2002. New Mexico Bird Finding Guide. New Mexico Ornithological Society, Albuquerque, NM.

Phillips, A. R., J. Marshall, and G. Monson. 1964. The Birds of Arizona. Univ. Ariz. Press, Tucson, AZ.

Winkler, H. 1979. Foraging ecology of Strickland's woodpecker in Arizona. *Wilson Bull.* 91:244–254.