



Arizona Woodpecker, photo by ©Bill Radke

## Conservation Profile

Species Concerns	
Small U.S. Population Increased Fire Intensity Climate Change (Droughts)	
Conservation Status Lists	
USFWS <sup>1</sup>	BCC List (BCR 34)
AZGFD <sup>2</sup>	Tier 1B
DoD <sup>3</sup>	No
BLM <sup>4</sup>	No
PIF Watch List <sup>5b</sup>	Yellow List
PIF Regional Concern <sup>5a</sup>	Stewardship Species BCR 34
Migratory Bird Treaty Act	
Covered	
PIF Breeding Population Size Estimates <sup>6</sup>	
Arizona	21,000
Global	200,000
Percent in Arizona	10.5%
PIF Population Goal <sup>5b</sup>	
Reverse Decline	
Trends in Arizona	
Historical (pre-BBS)	Unknown
BBS <sup>7</sup> (1968 – 2013)	Not given
PIF Urgency/Half-life (years) <sup>5b</sup>	
Insufficient Data	
Monitoring Coverage in Arizona	
BBS <sup>7</sup>	Not adequate
AZ CBM	Not covered
Associated Breeding Birds	
Elegant Trogon, Whiskered Screech-Owl, Sulphur-bellied Flycatcher, Rivoli's Hummingbird	

## Breeding Habitat Use Profile

Habitats Used in Arizona	
Primary: Madrean Pine-Oak Woodlands Secondary: Montane Riparian Woodland	
Key Habitat Parameters	
Plant Composition	Evergreen oaks in Madrean pine-oak woodland; sycamore, walnut, willows in adjacent riparian areas <sup>8</sup>
Plant Density and Size	No information, but likely requires abundant trees with > 14 inches DBH and high tree species diversity
Microhabitat Features	Nests and forages in mature riparian trees with soft wood, and in oaks; details not yet studied <sup>8</sup>
Landscape	Likely prefers landscape mosaic of evergreen oaks, pines, and adjacent sycamore dominated drainages <sup>8</sup>
Elevation Range in Arizona	
4,000 – 7,500 feet <sup>9</sup>	
Density Estimate	
Territory Size: No data Density: 1 – 4 pairs/100 acres <sup>8</sup>	

## Natural History Profile

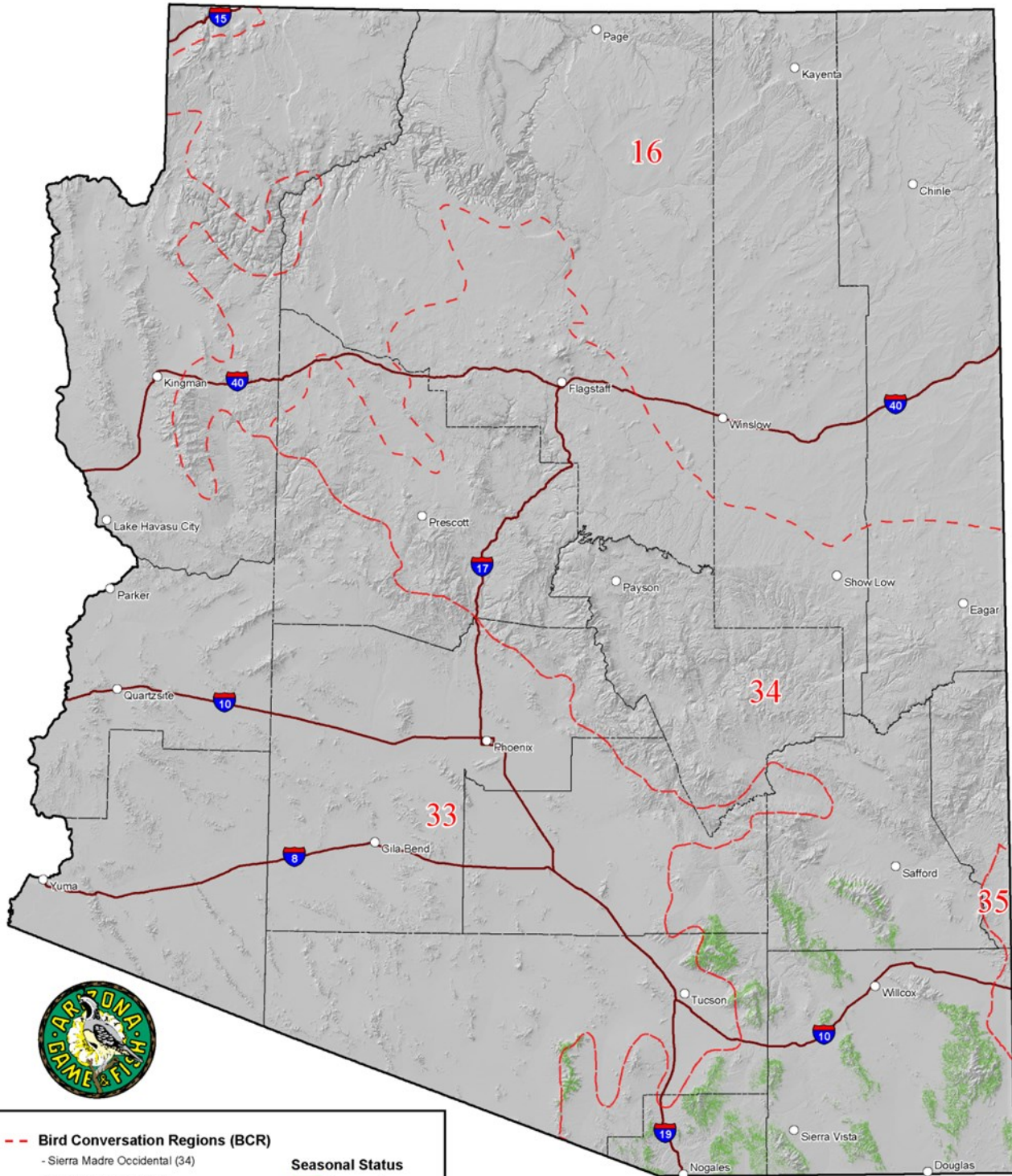
Seasonal Distribution in Arizona	
Breeding	Mid-April – mid-July <sup>9</sup>
Migration	Year-round resident
Winter	Some individuals winter at slightly lower elevations
Nest and Nesting Habits	
Type of Nest	Tree cavity
Nest Substrate	Evergreen oaks and sycamore; also walnut, maple, cottonwood <sup>8,9</sup>
Nest Height	15 – 20 feet (range 8 – 50 feet) <sup>9</sup>
Food Habits	
Diet/Food	Larvae and adult insects <sup>8</sup>
Foraging Substrate	Tree trunks and branches <sup>8</sup>



Confidence in Available Data: ● High ● Moderate ○ Low ^ Not provided

Last Update: October 2023

# Distribution of Arizona Woodpecker



This map represents the predictive distribution for an individual species. AZGFD warrants no guarantees of accuracy or currency of the data represented.

SPECIES ACCOUNT ● ARIZONA WOODPECKER *Picooides arizonae*



## General Information

### Distribution in Arizona

Arizona Woodpeckers are common in most of southeastern Arizona's sky island mountain ranges from the Baboquivari Mountains east to the Chiricahua Mountains, and north to the Santa Catalina, Galiuro, and Pinaleno mountains (Corman 2005). The species reaches its northernmost extent of its range in Arizona, where it is a year-round resident (Johnson et al. 1999). In Arizona, they nest primarily at elevations from approximately 4500 – 7500 feet, and locally in some canyons down to 3900 feet (Corman 2005). Only a small percent of the Arizona Woodpecker's global range is in the U.S., but almost all of that is in Arizona. This high stewardship responsibility, combined with how little is known about population status, trends, and conservation threats to this species, makes it a conservation priority.

### Habitat Description

Arizona Woodpeckers occur in large pine forests with abundant evergreen oaks, especially on lower and mid-elevation slopes (Corman 2005). They also nest in deciduous riparian canyon forests, where sycamores, cottonwoods, walnuts, and willows occur mixed with or adjacent to oaks (Davis 1965). Woodlands that are composed of all three of these vegetation types appear to be especially suitable for Arizona Woodpeckers (Davis 1965).

### Microhabitat Requirements

Arizona Woodpeckers excavate nest cavities in dead branches and trunks of evergreen oaks, sycamores, maples, walnut, and cottonwoods (Johnson et al. 1999). Sycamores are especially important because of their large size and amount of dead wood (Bock and Bock 1984). No data are available on diameters and heights of preferred stands, but based on reported cavity dimensions (Johnson et al. 1999), nest trees are likely > 14 inches in diameter. Arizona Woodpeckers forage mostly on the trunks and foliage of oaks, but also use sycamores, pines, willows, walnuts, cypress, and junipers (Johnson et al. 1999).

### Landscape Requirements

Area requirements and responses to landscape disturbances have not been studied for Arizona Woodpeckers. As for most woodpecker species, Arizona Woodpeckers likely require relatively large, uninterrupted patches of their preferred habitat type, but further study is needed.



## Conservation Issues and Management Actions

### Small Population

A high portion of the U.S. population of Arizona Woodpecker resides in Arizona. Its U.S. range extends into the adjacent Peloncillo and Animas mountains in New Mexico. This gives Arizona not only most of the responsibility for protecting this species in the U.S., but also provides the opportunity to make great strides toward its conservation.

### Threats Assessment

This table is organized by Salafsky et al.'s (2008) standard lexicon for threats classifications. Threat level is based on expert opinion of Arizona avian biologists and reviewers. We considered the full lexicon but include only medium and high threats in this account.

Threat	Details	Threat Level
<b>Agriculture</b> <ul style="list-style-type: none"> <li>Livestock farming and grazing</li> </ul>	Unsustainable grazing can degrade riparian habitat by reducing sycamore and willow regeneration	Medium
<b>Energy Production and Mining</b> <ul style="list-style-type: none"> <li>Mining and quarrying</li> </ul>	Locally habitat loss can be severe at or near mining sites	Medium
<b>Natural System Modifications</b> <ul style="list-style-type: none"> <li>Fire and fire suppression</li> </ul>	Catastrophic wildfires after years of suppression coupled with drought are a high threat	High
<b>Climate Change</b> <ul style="list-style-type: none"> <li>Ecosystem encroachment</li> <li>Changes in precipitation and hydrological regimes</li> </ul>	Long-term drought leads to loss of riparian vegetation	High

In the following section we provide more detail about threats, including recommended management actions. Threats with similar recommended actions are grouped.

#### Natural System Modifications:

- Fire and fire suppression

#### Energy Production and Mining:

- Mining and quarrying

#### Agriculture:

- Livestock farming and ranching

Sycamores appear to be very important to Arizona Woodpeckers, and sycamore recruitment is dependent on a permanently high water table and protection from heavy grazing (Bock and Bock 1984). In addition,



fire suppression may contribute to conifer encroachment in riparian areas and catastrophic fires that lead to stand replacement of pine-oak woodlands. The degree to which these land use practices affect Arizona Woodpecker habitat is currently unknown, but undertaking the recommended actions below will help determine these effects before planning conservation action for Arizona Woodpecker habitats.

### Climate Change:

- Ecosystem encroachment
- Changes in precipitation and hydrological regimes

Arizona Woodpeckers require oak woodlands and riparian forests for nesting and healthy insect populations, which are sensitive to the effects of prolonged droughts as a result of climate change.

### Recommended Actions:

1. Implement a comprehensive inventory of occupied and potentially suitable habitat areas of the Arizona Woodpecker for strategic conservation planning and development of a population monitoring plan.
2. Determine land uses and intensities in these delineated areas in order to prioritize conservation action, particularly for activities that compound the effects of climate change.

## Research and Monitoring Priorities

1. Investigate all aspects of habitat use, area requirements, responses to landscape disturbances, and responses to conservation action by Arizona Woodpeckers in order to determine effective ways to maintain U.S. populations.
2. Monitor Arizona Woodpeckers and determine status, trends, and responses to climate change.

## Literature Cited

<sup>4</sup>Arizona Bureau of Land Management Sensitive Species List – March 2017.

<sup>2</sup>Arizona Game and Fish Department. 2012. Arizona's State Wildlife Action Plan: 2012 – 2022. Arizona Game and Fish Department, Phoenix, AZ.

Bock, C.E., and J.H. Bock. 1984. Importance of sycamores to riparian birds in southeastern Arizona. *Journal of Field Ornithology* 55(1):97 – 103.

<sup>9</sup>Corman, T.E. 2005. Arizona Woodpecker. pp. 286-287 *in*: Arizona Breeding Bird Atlas. Corman, T.E., and C. Wise-Gervais (eds.) University of New Mexico Press. Albuquerque, NM.

Davis, J. 1965. Natural history, variation, and distribution of the Strickland's Woodpecker. *Auk* 82(4):537 – 590.

<sup>3</sup>Department of Defense. 2012. DoD PIF Mission-Sensitive Priority Bird Species. Fact Sheet #11. Depart-



ment of Defense Partners in Flight Program.

<sup>8</sup>Johnson, R.R., L.T. Haight and J.D. Ligon. 1999. Arizona Woodpecker (*Picoides arizonae*), The Birds of North America Online (A. Poole, ed.) Ithaca: Cornell Lab of Ornithology.

<sup>5a</sup>Partners in Flight. 2019. Avian Conservation Assessment Database, version 2019. Accessed on March 31, 2020.

<sup>6</sup>Partners in Flight Science Committee. 2019. Population Estimates Database, version 3.0. Accessed on March 31, 2020.

<sup>5b</sup>Rosenberg, K.V., J.A. Kennedy, R. Dettmers, R.P. Ford, D. Reynolds, J.D. Alexander, C.J. Beardmore, P. J. Blancher, R.E. Bogart, G.S. Butcher, A.F. Camfield, A. Couturier, D.W. Demarest, W.E. Easton, J.J. Giocomo, R.H. Keller, A.E. Mini, A.O. Panjabi, D.N. Pashley, T.D. Rich, J.M. Ruth, H. Stabins, J. Stanton, T. Will. 2016. Partners in Flight Landbird Conservation Plan: 2016 Revision for Canada and Continental United States. Partners in Flight Science Committee.

Salafsky, N., Salzer, D., Stattersfield, A.J., Hilton-Taylor, C., Neugarten, R., Butchart, S.H.M., Collen, B., Cox, N., Master, L.L., O'Connor, S. and Wilkie, D. 2008. A standard lexicon for biodiversity conservation: unified classifications of threats and actions. *Conservation Biology* 22(4): 897 – 911.

<sup>7</sup>Sauer, J.R., J.E. Hines, J.E. Fallon, K.L. Pardieck, D.J. Ziolkowski, Jr., and W.A. Link. 2016. The North American Breeding Bird Survey, Results and Analysis 1966 – 2013, Version 2016. USGS Patuxent Wildlife Research Center, Laurel, MD. Accessed on July 1, 2016.

<sup>1</sup>U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern 2008. United States Department of Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Arlington, VA. 85 pp.

## Recommended Citation

Arizona Bird Conservation Initiative and Sonoran Joint Venture. 2023. Arizona Woodpecker (*Picoides arizonae*) Species Account. Available at <https://sonoranjv.org/accounts/arizona-woodpecker.pdf>

