



Red-naped Sapsucker, photo by ©Robert Shantz

## Conservation Profile

Species Concerns	
Habitat Degradation	
Aspen Decline	
Climate Change (habitat loss)	
Conservation Status Lists	
USFWS <sup>1</sup>	No
AZGFD <sup>2</sup>	Tier 1C
DoD <sup>3</sup>	No
BLM <sup>4</sup>	No
PIF Watch List <sup>5b</sup>	No
PIF Regional Concern <sup>5a</sup>	No
Migratory Bird Treaty Act	
Covered	
PIF Breeding Population Size Estimates <sup>6</sup>	
Arizona	6,600 ●
Global	2,000,000 ●
Percent in Arizona	0.33%
PIF Population Goal <sup>b</sup>	
Maintain	
Trends in Arizona	
Historical (pre-BBS)	Unknown
BBS <sup>7</sup> (1968 – 2013)	Not given
PIF Urgency/Half-life (years) <sup>5b</sup>	
> 50	
Monitoring Coverage in Arizona	
BBS <sup>7</sup>	Not adequate
AZ CBM	Not covered
Associated Breeding Birds	
Downy Woodpecker, Violet-green Swallow, Warbling Vireo, House Wren, Hermit Thrush, Yellow-rumped Warbler, Western Tanager	

## Breeding Habitat Use Profile

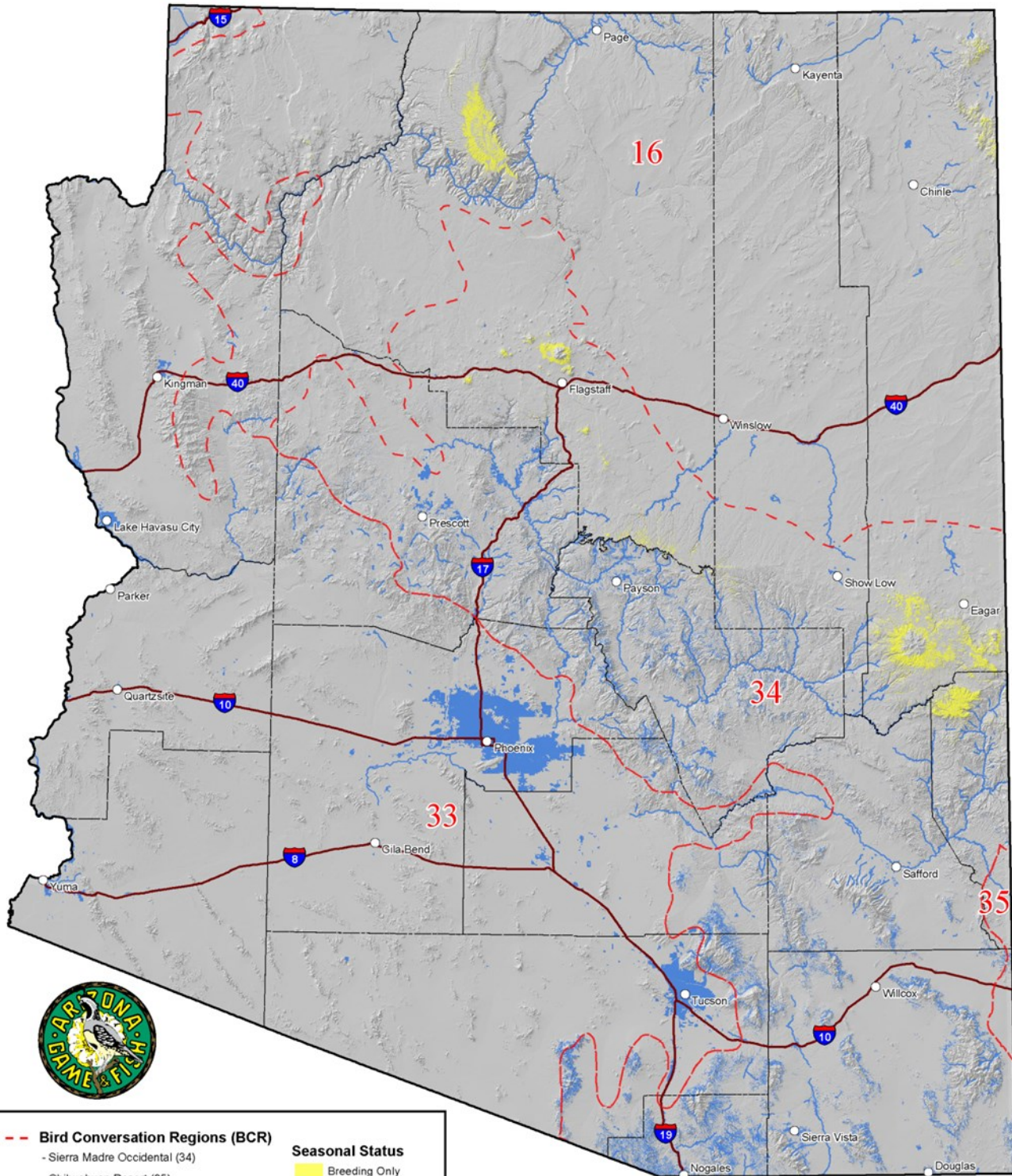
Habitats Used in Arizona	
Primary: Mixed Conifer-Aspen Forest	
Secondary: Montane Riparian	
Key Habitat Parameters	
Plant Composition	Mixed conifer species: Douglas fir, white fir, and ponderosa pine; deciduous tree presence important, especially aspen and riparian; pine-oak woodland in winter only <sup>8</sup>
Plant Density and Size	Tendency toward more open forests but versatile; mature live stands large enough to create cavities; prefers trees > 12 inches DBH for nesting <sup>9</sup>
Microhabitat Features	Aspen groves greatly increase value of mixed-conifer stands for this species <sup>8,9</sup>
Landscape Features	Unknown
Elevation Range in Arizona	
6,850 – 9,800 feet <sup>8</sup>	
Density Estimate	
Territory Size: 5 – 10 acres <sup>9</sup>	
Density: 2 – 5 birds/100 acres (up to 20/acre in ideal habitat) <sup>9</sup>	

## Natural History Profile

Seasonal Distribution in Arizona	
Breeding	Mid-April – July <sup>8</sup>
Migration	February – April; September – October
Winter	October – February; in southern Arizona
Nest and Nesting Habits	
Type of Nest	Cavity <sup>9</sup>
Nest Substrate	Live aspen, or conifer snag <sup>9</sup>
Nest Height	Above ground, > 2 feet <sup>9</sup>
Food Habits	
Diet/Food	Sap, fruit, and arthropods <sup>9</sup>
Foraging Substrate	Deciduous trees and shrubs; conifers in winter



# Distribution of Red-naped Sapsucker



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

SPECIES ACCOUNT • RED-NAPED SAPSUCKER *Sphyrapicus nuchalis*



## General Information

### Distribution in Arizona

Red-naped Sapsuckers occur in scattered mountain ranges across Arizona's northeastern, eastern, and central regions. The largest population is in the White Mountains, but they also nest along the Mogollon Rim, San Francisco Peaks, Kaibab Plateau, Chuska Mountains, and in other high mountain ranges (Sitko and Corman 2005). Red-naped Sapsuckers also winter in Arizona, primarily in the central and southeastern regions, but with scattered records throughout the state (Walters et al. 2002).

### Habitat Description

Red-naped Sapsuckers nest in high-elevation mixed conifer forests, which typically have a deciduous forest component or a wooded riparian drainage (Sitko and Corman 2005). They nest in cavities (generally in deciduous trees) and depend on sapwells as a foraging source, which they usually drill into deciduous trees or shrubs, such as cottonwood, aspen, water birch, chokecherry, alder, and willows (Walters et al. 2002). In winter, they occur in riparian areas, rural and urban neighborhoods, and parks with exotic deciduous trees, pine-oak, and other oak habitats (Walters et al. 2002).

### Microhabitat Requirements

While the basic nesting habitat for Red-naped Sapsuckers is mixed conifer forests, deciduous trees, especially aspen, are important for both foraging and nesting (Walters et al. 2002). They prefer live deciduous trees with DBH  $\geq$  12 inches and heart rot for nesting due to the ease of excavating cavities (Walters et al. 2002). Foraging Red-naped Sapsuckers hunt for insects during the nesting season, usually in deciduous shrubs and trees, and they cluster sapwells throughout their breeding territory (Walters et al. 2002).

### Landscape Requirements

Area requirements and landscape requirements have not been studied for Red-naped Sapsuckers, nor have their responses to land uses and forestry practices.



## Conservation Issues and Management Actions

### 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 ranching</li> </ul>	May impact recruitment of riparian tree species and aspen	Medium
<b>Natural System Modifications</b> <ul style="list-style-type: none"> <li>Fire and Fire suppression</li> <li>Other ecosystem modifications</li> </ul>	Fire could remove key feeding/nesting trees, but may open forest stands allowing for aspen regeneration.  Accelerated aspen decline is a concern, possibly related to climate change; heavy elk browsing of young aspen and scrub willow stands	Medium
<b>Climate Change</b> <ul style="list-style-type: none"> <li>Ecosystem encroachment</li> <li>Changes in precipitation and hydrological regimes</li> </ul>	Both threats may increase rate of aspen decline; may impact mixed conifer/deciduous tree components if unadaptable to climatic changes	High

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

#### **Agriculture:**

- Livestock farming and ranching

Unsustainable livestock grazing can cause degradation of riparian areas by impacting recruitment of riparian shrubs and trees, including aspen. Livestock spend more time in mesic habitat types than in uplands, and so they have proportionally greater impacts on the deciduous woodlands that support Red-naped Sapsuckers.

#### *Recommended Actions:*

1. Encourage sustainable livestock grazing or exclusion of livestock in the most important areas for Red-naped Sapsucker, especially aspen and montane riparian habitats.
2. Provide alternate water sources to keep livestock out of sensitive riparian areas.
3. Promote the importance of healthy aspen and riparian areas with agency partners, landowners, and the public, including informational materials on the threats to these important habitats.



### Natural System Modifications:

- Fire and fire suppression
- Other ecosystem modifications

### Climate Change:

- Ecosystem encroachment
- Changes in precipitation and hydrological regimes

Recent evidence suggests western aspen clones can experience catastrophic loss from disease and sudden mortality. While this is well-documented throughout the region, little is known of the current status of Arizona aspen stands. Climate change is one of the suspected causes of accelerated aspen decline. With prolonged droughts predicted from climate models, aspen and other deciduous woodlands interspersed with coniferous forests are likely threatened. This, coupled with excessive browsing of aspen saplings and scrub willows by elk, deer, and livestock, leads to concern. Due to the Red-naped Sapsucker's close association with aspen and other deciduous woodlands, causes of aspen die-offs and the status of higher elevation woody riparian communities are critically important in conservation planning for this species.

### Recommended Actions:

1. Implement a climate-change oriented monitoring or repeated status assessment program for aspen stands and montane riparian areas.
2. Promote grazing and fire management practices that support aspen regeneration.
3. Manage for groups of aspen stands of different age classes in a larger forest complex to ensure continual availability of older trees and snags (> 12 inches DBH) for nesting.
4. Use elk and cattle exclosures to promote the growth of regenerating aspen and scrub willow stands.
5. Manage elk populations to reduce excessive browsing pressure on regenerating aspen and scrub willow stands.
6. Strategically conserve and monitor the highest value areas in current aspen stands and adjacent deciduous and coniferous woodlands within Red-naped Sapsucker range.

### Research and Monitoring Priorities

1. Delineate and evaluate stand condition in current aspen stands and adjacent deciduous and coniferous/deciduous mixed woodlands. Identify the highest-value areas that are within the Red-naped Sapsucker's breeding range for strategic conservation action and monitoring.
2. Develop a monitoring program for Red-naped Sapsucker populations that takes into account possible distribution shifts in response to climate change and aspen decline.
3. Determine area and landscape requirements of Red-naped Sapsuckers, including responses to artificial disturbances and minimum distance buffers.
4. Clarify habitat needs for wintering Red-naped Sapsuckers.



## Literature Cited

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- <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.
- <sup>9</sup>Walters, E.L., E.H. Miller and P.E. Lowther. 2002. Red-naped Sapsucker (*Sphyrapicus nuchalis*), The Birds of North America Online (A. Poole, ed.) Ithaca: Cornell Lab of Ornithology.

## Recommended Citation

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