Williamson's Sapsucker Sphyrapicus thyroideus



Photo by Martin Meyers

Habitat Use Profile

Habitats Used in Nevada				
Coniferous Forest				
Aspen				
Key Habitat Parameters •				
Plant Composition	Ponderosa, Jeffrey, and lodgepole pines, and Douglas-fir for foraging; often aspen for nesting ²			
Plant Density & Size	Little information; probably prefers > 30 snags/ ha [12 / ac] with dbh > 30 cm [12 in] ^{2, 4}			
Mosaic	Coniferous Forest juxtaposed with Aspen stands, with standing snags ²			
Distance to Water	No known relationship			
Response to Fragmentation	Probably fairly tolerant due to small home ranges ²			
Response to Vegetation Removal	Negative to tree/snag removal; tolerates fires well if some living timber and standing snags remain ^{2, EO}			
Area Requirements ●				
Minimum Patch Size	~ 15 ha [38 ha] ^{EO}			
Recommended Patch Size	> 100 ha [250 ac] ^{EO}			
Home Range	~ 4 – 9 ha [10 - 22 ac] ²			

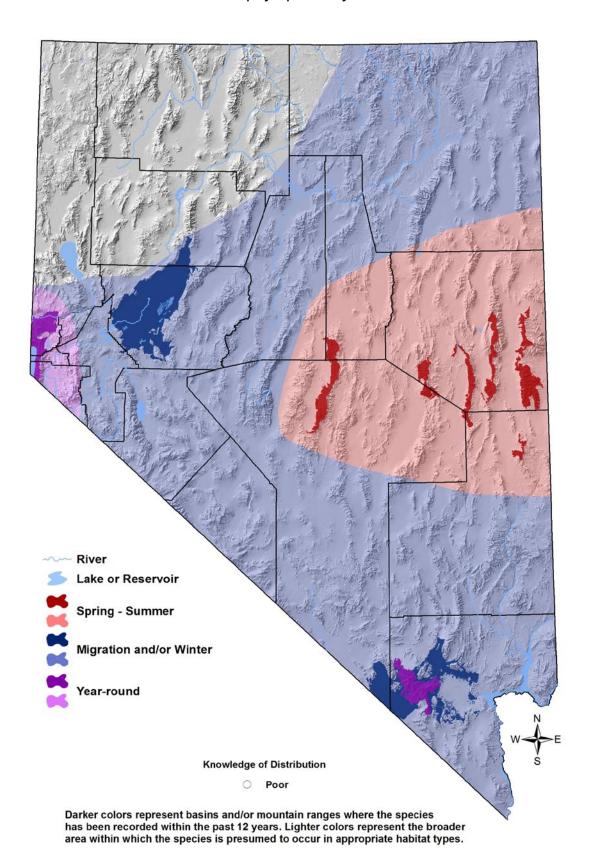
Conservation Profile

Cons	Conservation Profile			
Priority Status				
Conservation Priority Species				
	Species Concerns			
	Possible declines ²			
	Restricted habitat			
	Other Rankings			
Continental PIF	Stewardship			
Audubon Watchlist	Yellow			
NV Natural Heritage	S2			
USFWS	Bird of Conservation Concern, Migratory Bird			
BLM	None			
USFS	Management Indicator			
NDOW	Stewardship			
	Trends			
Historical ○	Unknown			
Recent ●	Pronounced declines in 1980's; more			
	recent trends unclear ^{2, 7}			
Population Size Estimates				
Nevada (NBC) ●	1,500			
Global ●	310,000 6			
Percent of Global	< 1%			
Population Objective				
Maintain ⁶				
Monitoring Coverage				
Source	Nevada Bird Count			
Coverage in NV	Good			
Key Conservation Areas				
Protection	Carson Range, White Pine County, Spring Mountains			
Restoration	Same			

Natural History Profile

National History Frome			
Seasonal Presence in Nevada			
Year-round in Carson Range and Spring Mts;			
Spring – Summer elsewhere ^{2, EO}			
Known Breeding Dates in Nevada			
May – mid-August ^{2, 3}			
Nest and Nesting Habits			
Nest Placement	Excavates cavity most often in aspen snag 25 – 70 cm [10 – 27 in] dbh; also in living aspen or conifer with dead top ^{2, 3}		
Site Fidelity	High for breeding territory ²		
Other	Usually excavates new cavity every year ²		
Food Habits			
Basic	Tree trunk prober, gleaner, and borer ²		
Primary Diet	Conifer sap wells, especially in non-breeding season ²		
Secondary Diet	Ants and other insects in breeding season ²		

Williamson's Sapsucker Sphyrapicus thyroideus



Williamson's Sapsucker

Sphyrapicus thyroideus

Overview

Williamson's Sapsucker is somewhat unusual in that it is tightly tied to one forest type (Aspen) for nesting, and another (Coniferous Forest) for foraging. Populations in Nevada are fragmented, and the species apparently does not breed in large portions of central Nevada despite the availability of presumably suitable habitat. In western and southern Nevada, Williamson's Sapsuckers occur year-round, and in eastern Nevada, they are summer breeders that migrate. Their seasonal distribution around the state is very poorly known, and the range map shown above could change significantly with the collection of additional data. During migration, Williamson's Sapsuckers may occur broadly in pinyon-juniper or riparian woodlands.²

Because Williamson's Sapsuckers nest primarily in snags or live trees with broken or dead tops, older forest stands with some decadence will usually be most suitable,^{5, EO} especially if snags are concentrated in patches and relatively large.¹ Possible threats are poorly characterized, although it can be inferred that loss or degradation of higher-elevation aspen stands or a significant decrease in snag density would be detrimental. Preserving a landscape matrix in which healthy Coniferous Forest and Aspen habitats are both readily available will be beneficial.

Abundance and Occupancy by Habitat

Birds / 40 ha on NBC Transects in the Great Basin Region (Mojave data insufficient)

Primary Habitat at Transect	Transects Occupied	Birds/40 ha (95% C.I.)
Coniferous Forest	32% (6/19)	1.8 (0.4 – 3.2)
Aspen	11% (2/18)	0.4 (-0.1 – 0.9)

- Where measured elsewhere within the West, densities range from 2-8 birds / 40 ha²
- BBS-based population estimate for Nevada (500 birds)⁵ is lower than NBC estimate (1,500)

Nevada-Specific Studies and Analyses

Landscape Associations (NBC data)

• Seven out of eight NBC transects where Williamson's Sapsuckers were present were dominated by montane Coniferous Forest (the eighth had a large Pinyon-Juniper component); six of the transects had a secondary Aspen component (1-7% of land cover according to GIS vegetation map).

Williamson's Sapsucker

Sphyrapicus thyroideus

Main Threats and Challenges

Habitat Threats

- Reported to be relatively resistant to many typical habitat disturbances such as fire, grazing, and logging as long as some forest patches and snags remain²
- Loss of snags to fire, salvage logging
- Loss or degradation of aspen woodland

Research, Planning, and Monitoring Challenges

- Habitat use and patch size requirements for Nevada populations is not fully understood
- The seasonal distribution of the species is very poorly understood

Conservation Strategies

Habitat Strategies

- Coniferous Forest (p. Hab-5-1) and Aspen (p. Hab-3-1) habitat conservation strategies benefit this species
- Within known range, give special conservation consideration to aspen stands located within a coniferous forest matrix
- Retain aspen snags of the preferred size range, in clumps wherever possible

Research, Planning, and Monitoring Strategies

- Continue monitoring to better determine current population trends
- Conduct surveys in suitable habitat in areas where Williamson's Sapsucker is currently undocumented
- Conduct research to better determine habitat and patch size requirements, and seasonal distribution patterns

Public Outreach Strategies

None identified

References: ¹Conway and Martin; ²Dobbs et al. (1997); ³GBBO unpublished Atlas data; ⁴GBBO (2008a); ⁵Gyug et al. (2009); ⁶Rich et al. (2004); ⁷Sauer et al. (2008); ^{EO} Expert opinion