Melozone aberti



Photo by Martin Meyers

Habitat Use Profile

Habitats Used in Nevada				
Mojave Lowland Riparian Mesquite-Acacia Springs (Agriculture)				
Key Habitat Parameters ●				
Plant Composition	Willow, cottonwood, mesquite, acacia, saltcedar, quailbush, and other dense, mesic or semi-mesic shrubs and small trees ⁷			
Plant Density	Dense shrub and forb/grass cover			
Mosaic	No known landscape mosaic requirements			
Distance to Water	Most abundant close to water EO			
Response to Vegetation Removal	Negative to shrub/understory removal ⁷			
Area Requirements ○				
Minimum Patch Size	Unknown, estimated 3 ha [7 ac] EO			
Recommended Patch Size	> 20 ha [50 ac] ^{EO}			
Territory Size	1.2 ha [3.0 ac] ⁷			

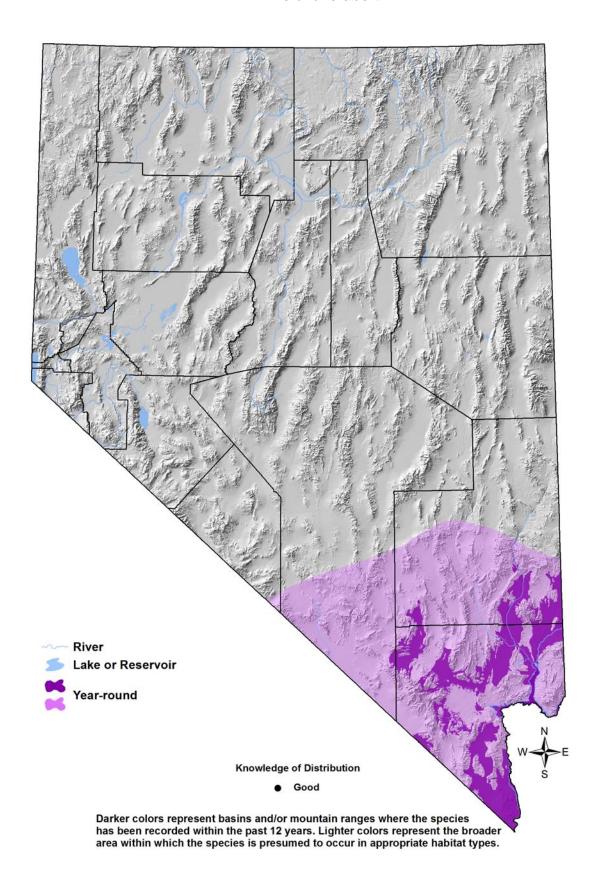
Conservation Profile

Conservation Frome				
Priority Status				
Conservation Priority Species				
Species Concerns				
	Historical declines			
Habitat threats				
Other Rankings				
Continental PIF	Watch List			
Audubon Watchlist	Yellow			
NV Natural Heritage	S3			
USFWS	Migratory Bird			
BLM	None			
USFS	None			
NDOW	Conservation Priority			
Trends				
Historical ●	Rangewide declines ⁷			
Recent ●	Stable ⁶			
Population Size Estimates				
Nevada (NBC) ●	2,300			
Global •	210,000 5			
Percent of Global	1%			
	opulation Objective			
Maintain / Increase 5, EO				
Monitoring Coverage				
Source	Nevada Bird Count			
Coverage in NV	Good			
Key Conservation Areas				
Protection	Muddy and Virgin Rivers, Mesquite-			
Restoration	Acacia washes Muddy and Virgin Pivors, Springs			
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Natural History Profile

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Seasonal Presence in Nevada			
Year-round Year-round			
Known Breeding Dates in Nevada			
Early April – early August ²			
Nest and Nesting Habits			
Nest Placement	In dense shrub or tree, 1.5-2.5 m [4.9 – 8.2 ft] above ground ⁷		
Site Fidelity	High; species is sedentary with year-round residency		
Other	Usually nests near water ⁷		
Food Habits			
Basic	Ground / litter forager		
Primary Diet	Invertebrates ⁷		
Secondary Diet	Seeds, especially outside the breeding season ⁷		

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Overview

In southern Nevada, Abert's Towhees occur in dense, shrubby riparian vegetation up to 1,300 m [4,300 ft] in elevation,⁷ and are especially numerous in the Colorado, Muddy, and Virgin River Valleys, and in the Las Vegas Wash. They also occur in smaller riparian and spring areas, Mesquite-Acacia washes characterized by dense understory, and in some agricultural lands.

Ideal habitat is characterized by high foliage density at the shrub and ground level, presence of cottonwoods and willows, and nearby water.⁴ However, like several other southern Nevada riparian birds, Abert's Towhee has adapted to saltcedar stands in areas where native riparian vegetation has been lost or severely degraded. In such cases, it is important that efforts to restore native vegetation avoid removing large saltcedar stands very rapidly. Restoration should instead occur in a stepwise manner to ensure that a significant amount of usable habitat is always present in the project area. Unintended defoliation of saltcedar by biocontrol agents (see Willow Flycatcher account for details, pp. Spp-59-1) poses similar risks. Fortunately, Abert's Towhee responds very well to most riparian restoration efforts, including those that target Southwestern Willow Flycatcher.⁷ For example, densities of Abert's Towhees doubled on the San Pedro River in Arizona only three years after cattle were removed to allow for recovery of riparian shrubs and ground covers.³

Abundance and Occupancy by Habitat

Birds / 40 ha on NBC Transects in the Mojave Region

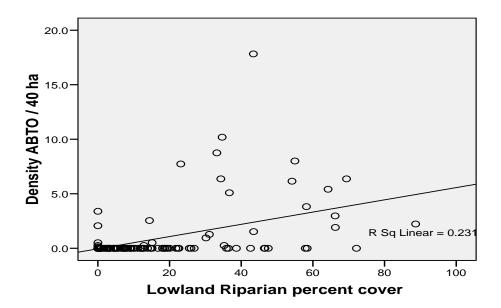
Primary Habitat at Transect	Transects Occupied	Birds/40 ha (95% C.I.)
Lowland Riparian	50% (18/36)	5.3 (3.3 – 7.3)
Agriculture	80% (4/5)	2.6 (0.6 – 4.6)
Mesquite-Acacia	14% (2/14)	0.5 (n/a)

Nevada-Specific Studies and Analyses

Landscape Associations (NBC data)

The density of Abert's Towhee was statistically related to the amount of Lowland Riparian habitat present within survey transects (see figure below). Strong correlations were also found with the amount of Agricultural habitat present and the proximity to water (*Appendix 3*).

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Main Threats and Challenges

Habitat Threats

- Heavy livestock grazing that significantly reduces foliage density in the shrub and ground cover layers ^{EO}
- Water diversions or groundwater pumping that lower water tables and reduce density of native riparian shrubs, forbs, and grasses.^{EO} Saltcedar is more resistant to these impacts¹
- Flood control and other channel engineering activity that physically damage habitat or alter hydrology ^{EO}
- Removal of large areas of saltcedar without revegetation efforts of native riparian habitat
- Loss of habitat to fire

Research, Planning, and Monitoring Challenges

- Patch size and landscape mosaic preferences are not well characterized
- Factors promoting the use of agricultural lands and mesquite-acacia washes are not explicitly known, although foliage density of understory and ground cover is important

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Conservation Strategies

Habitat Strategies

- Mojave Lowland Riparian (p. Hab-11-1), Mesquite-Acacia (p. Hab-10-1), and Springs (p. Hab-19-1) habitat conservation strategies benefit this species
- Manage livestock grazing and other land uses to maintain dense riparian shrub and ground cover
- Pursue restoration of native riparian habitat in suitable areas, such as Las Vegas Wash and other revegetation projects. Where saltcedar is removed, ensure that native habitat is restored in a timely manner

Research, Planning, and Monitoring Strategies

- In situations where water diversions or groundwater pumping may lower water tables or impact riparian shrubs, monitor for impacts on Abert's Towhees
- Develop fire management strategies that emphasize the protection of native riparian habitat
- Conduct additional research on the factors that promote Abert's Towhee use of agricultural lands and mesquite-acacia habitat

Public Outreach Strategies

None identified

References: ¹Brand et al. (2010); ²GBBO unpublished Atlas data; ³Krueper et al. (2003); ⁴Meents et al. (1981); ⁵Rich et al. (2004); ⁶Sauer et al. (2008); ⁷Tweit and Finch (1994); ^{EO}Expert opinion

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Mojave Lowland Riparian Habitat. Photo by Jen Ballard.