

Abert's Towhee (*Pipilo aberti*)

NMPIF level: Biodiversity Conservation Concern, Level 1 (BC1)

NMPIF assessment score: 17

NM stewardship responsibility: Low

National PIF status: Watch List

New Mexico BCRs: 34, 35

Primary breeding habitat(s): Southwest Riparian

Summary of Concern

Abert's Towhee is an obligate riparian species of the Sonoran Desert. The small New Mexico population along the Gila River and elsewhere is vulnerable to habitat loss or alteration that may increase already high rates of nest failure.

Associated Species

Gambel's Quail, Bell's Vireo (SC1), Bewick's Wren, Northern Cardinal, House Finch

Distribution

Abert's Towhee is a resident riparian species in the lower Sonoran zone of the southwest United States. Most of its range is in southern and western Arizona, extending to portions of southeast California, southern Nevada and Utah, southwest New Mexico and extreme northern Sonora.

In New Mexico, this species occurs along portions of the Gila River from the Arizona border to Mogollon Creek in Grant County, and at the San Simon Cienega in Hidalgo County (Tweit and Finch 1994, Parmeter et al. 2002).

Ecology and Habitat Requirements

Abert's Towhee occupies dense brush and woodland areas in the Sonoran Desert, primarily riparian areas or adjacent to dense agricultural edge. Its preferred streamside habitat consists of well-developed

cottonwood-willow gallery forest with a dense understory of shrubs. More marginal habitat includes degraded or remnant riparian woodland, marshes, and mixed exotic-native habitat including suburban areas and along irrigation ditches (Rosenberg et al. 1991, Tweit and Finch 1994).

In New Mexico, this species is especially common along the edges of mature mixed broadleaf forest along the Gila River (Stoleson and Finch 1998). It is uncommon to nonexistent in early successional habitats such as pure Russian olive or willow. Along the Gila, nests have been observed in mesquite, boxelder, Russian olive, New Mexico locust and Fremont cottonwood. Finch (1985) observed that throughout the breeding season 40–60 % of all nests were built in mistletoe clumps. Abert’s Towhees apparently prefer nesting in trees to shrubs, when sufficient foliage cover is available (Tweit and Finch 1994). Rain during the breeding season can produce a peak in nesting activity. Two broods per season may be raised, and as many as six nest attempts may be attempted due to previous nest failures (Tweit and Finch 1994).

Conservation Status

Species Assessment

DISTRIBUTION	5
THREATS	4
GLOBAL POPULATION SIZE	4
LOCAL POPULATION TREND	3
IMPORTANCE OF NEW MEXICO TO BREEDING	1
COMBINED SCORE	17

Abert’s Towhee is a Biodiversity Conservation Concern, Level 1 species for New Mexico, with a total assessment score of 17. Abert’s Towhee is a national PIF Watch List species. At the continental level, it receives a maximum PIF vulnerability score of 5 for its restricted year-round range, and a 4 for its small population size. From NMPIF, it receives a score of 4 for threat to breeding in the state. Abert’s Towhee is listed as threatened in the state of New Mexico.

Population Size

PIF estimates a species population of 230,000. The size of the New Mexico population is unknown; PIF estimates that less than one percent of the species population occurs in the state. Abert’s Towhees can reach high densities in local areas. Spring (Mar–Apr) densities of 107 birds/40 ha were reported in

structurally well-developed cottonwood-willow habitat on the San Pedro River in Arizona (D. Krueper, pers. comm.). Rosenberg et al. (1991) reported 55 birds/40 ha in similar habitat along lower Colorado River and up to 30 birds/40 ha in salt cedar-honey mesquite. Rosenberg et al. (1987) found a late spring density of 49 birds/40 ha in mixed exotic-native suburban habitat in Phoenix area.

Population Trend

This species is not well sampled by BBS, and data are limited. Across its range, Abert's Towhee shows no clear population trends (annual trend = -0.1, $p = 0.96$, $n = 25$). NMPIF assigns a score of 3 for local population trend, indicating uncertainty.

Threats

Across its range, much of the preferred habitat of this species has been altered or eliminated. In New Mexico, Abert's Towhees are highly vulnerable to any further loss or degradation of dense lowland riparian habitat along the Gila River. This species also suffers high rates of nest predation and parasitism, particularly in non-optimal habitat (Tweit and Finch 1994).

Management Issues and Recommendations

Management for Abert's Towhee in New Mexico should focus on protecting and improving riparian woodland habitat in the southwestern portion of the state.

NMPIF Recommendations

- Avoid damage or disturbance to breeding habitat along the Gila River.
- Maintain and increase cottonwood/willow associations with a dense understory.
- Manage or exclude grazing to promote maintenance of a dense understory.

Species Conservation Objectives

PIF Objectives

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

NMPIF Objectives

- Survey for additional populations in the Gila watershed.
- Increase populations to at least 50 breeding pairs along the Gila River.
- Increase population to 8 breeding pairs at San Simon Cienega.

Sources of Information

Finch, D. M. 1985. Multivariate analysis of early and late nest sites of Abert's Towhees. *Southwest. Nat.* 30:427-432.

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Rosenberg, K. V., R. D. Ohmart, W. C. Hunter, and B. W. Anderson. 1991. *Birds of the lower Colorado River valley*. Univ. Arizona Press, Tucson, AZ.

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Stoleson, S., and D. Finch. 1998. Breeding bird activity along the Gila River in the Gila-Cliff valley. Unpublished data. USFS-Rocky Mountain Research Station, Albuquerque, NM.

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