

## **Northern Beardless-Tyrannulet (*Camptostoma imberbe*)**

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

NMPIF assessment score: 13

National PIF status: No special status

New Mexico BCRs: 34

Primary breeding habitat(s): Southwest Riparian

Other habitats used: Chihuahuan Desert Shrub

### **Summary of Concern**

Northern Beardless-Tyrannulet is a species of Mexico and Central America, with a small northern breeding population extending into southern Arizona and southwestern New Mexico. The state population is dependent on the continued presence of suitable riparian habitat at the single known breeding location in Guadalupe Canyon, in southern Hidalgo County.

### **Associated Species**

Common Ground-Dove (BC1), Black-chinned Hummingbird (SC2), Ladder-backed Woodpecker, Verdin, Bell's Vireo (SC1), Abert's Towhee (BC1), Blue Grosbeak, Varied Bunting (BC2)

### **Distribution**

The Northern Beardless-Tyrannulet is the only United States representative of the Elaeniinae, a large subfamily of mostly South American tyrannid flycatchers. It is resident from Costa Rica north through most of Central America, and southern and central Mexico. The range extends farther north in Mexico along the Pacific slope to Sonora and Chihuahua. Short-distance migrants extend the breeding range to its northern boundary in southern Arizona and southwestern New Mexico. This species also occurs along the lower Rio Grande valley in southern Texas (Tenney 2000).

In New Mexico, Northern Beardless-Tyrannulet is known to breed only in Guadalupe Canyon in southern Hidalgo County (Parmeter et al. 2002).

## Ecology and Habitat Requirements

This species is most common in the tropical zone, from lowlands to up to 6,000 feet. It is generally associated with semi-open brushy woodlands, scrubby riparian thickets, and edges of gallery or secondary forest. It tends to occupy patchy forest habitat and avoids dense forest interiors. Flowing water is frequently but not always present. In southern Arizona, Northern Beardless-Tyrannulet may be locally common in riparian deciduous forest and woodlands composed of willow, cottonwood, mesquite and canyon hackberry. It also occurs in mesquite scrublands and in oak-sycamore-mesquite associations (Philips et al. 1964, Hubbard 1978, Tenney 2000). In Guadalupe Canyon, habitat is cottonwood-dominated riparian woodland and adjacent scrub, particularly dense thickets of mesquite, acacia, hackberry, and other thorny species (Williams 1999).

Northern Beardless-Tyrannulets occupy breeding grounds in Arizona and New Mexico from mid-March through August. In Arizona, two or three broods are sometimes raised. Nests are typically well-concealed globular balls of vegetation nestled in caterpillar or spider webs, or in clumps of vegetation. In riparian habitat in Arizona, nests are most commonly situated in or on top of tent caterpillar webs, on horizontal limbs of black willow or Fremont cottonwood, 6-50 ft above the ground. Nests also are built in Arizona hackberry, oaks, hanging branches of mesquite, dense needle clusters near branch tips of alligator juniper (Brandt 1951, Tenney 2000). In Guadalupe Canyon, nests are frequently built in mistletoe clumps (Williams 1999). Mesquite thickets and smaller trees are favored for feeding.

## Conservation Status

### Species Assessment

DISTRIBUTION	3
THREATS	4
GLOBAL POPULATION SIZE	3
LOCAL POPULATION TREND	2
IMPORTANCE OF NEW MEXICO TO BREEDING	1
<b>COMBINED SCORE</b>	<b>13</b>

Northern Beardless-Tyrannulet is a Biodiversity Conservation Concern, Level 1 species for New Mexico, with a NMPIF combined score of 13. From NMPIF, it receives a high vulnerability score of 4 for threats to breeding in the state. In the state of New Mexico, Northern Beardless-Tyrannulet is listed as endangered by New Mexico Department of Game and Fish.

## **Population Size**

PIF estimates a species population of 2 million but little quantitative data exists. Less than 5% of the population occurs in the United States. The New Mexico population at Guadalupe Canyon consists of a small number of pairs. Maximum density there is 5 territories per 2-mile transect (Williams 1999).

## **Population Trend**

No BBS data exists for this species, and overall trends are not known. Tenney (2000) suggests possible population declines in Mexico due to habitat loss. The small New Mexico population appears to be stable or increasing.

## **Threats**

In Mexico and Central America, large areas of lowland tropical deciduous forest, considered primary habitat of the Northern Beardless-Tyrannulet, have disappeared as a result of widespread farming, cattle-raising, and exploitation of forest resources (Arizmendi et al. 1990). The New Mexico population of this species is highly vulnerable due to its small size and restriction to a single location. Riparian breeding habitat at Guadalupe Canyon is vulnerable to human disturbance, grazing, fire, and potentially to long-term declines due to drought.

## **Management Issues and Recommendations**

Management options for this species are limited to protecting and enhancing breeding habitat in Guadalupe Canyon.

## **NMPIF Recommendations**

- Maintain existing restrictions on access in Guadalupe Canyon.
- Manage or exclude grazing as needed to maintain riparian habitat. Cool-season-only grazing or exclusions may be required as conditions warrant.
- Avoid prescribed burns in this area.

## **Species Conservation Objectives**

### **NMPIF Objectives**

- Maintain or increase the breeding population at Guadalupe Canyon.

### **Sources of Information**

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