

## **Broad-billed Hummingbird (*Cynanthus latirostris*)**

NMPIF level: Biodiversity Conservation Concern, Level 2 (BC2)

NMPIF assessment score: 13

NM stewardship responsibility: Low

National PIF status: No special status

New Mexico BCRs: 34, (35)

Primary breeding habitat(s): Southwest Riparian

### **Summary of Concern**

Broad-billed Hummingbird is a mostly Mexican species with a northern distribution just extending in southern Arizona and New Mexico. The state population is dependent on riparian habitat at a single known breeding location, Guadalupe Canyon in Hidalgo County.

### **Associated Species**

Black-tailed Gnatcatcher, Varied Bunting (BC2)

### **Distribution**

Broad-billed Hummingbird is resident across much of western and central Mexico. A partially migratory breeding population extends further north in Sonora and Chihuahua, and across the border into southeast Arizona and southwest New Mexico.

In the state, this species breeds regularly only in Guadalupe Canyon in Hidalgo County, where it may be locally common. It occurs rarely in other canyons in the Peloncillo Mountains (Powers and Wethington 1999, Parmeter et al. 2002).

### **Ecology and Habitat Requirements**

The northern populations of the Broad-billed Hummingbird inhabit riparian zones of arid canyons that contain sufficient resources to support nesting for up to 5 months. In the Southwest, the species may be

locally common in riparian areas dominated by sycamore or cottonwood and dense mesquite, wandering occasionally to higher elevations (Powers and Wethington 1999). In Guadalupe Canyon, three sub-divisions of habitat exist: riparian creek bottom, steep north-facing slopes, and xeric south-facing slopes. Broad-billed Hummingbirds nest primarily in thickets near the canyon edge, having a northern exposure and bordered by rock outcroppings with hackberry, algerita, and mesquite. Dominant plant species within studied nest plots were small trees and shrubs, including netleaf hackberry, one-seed juniper, red barberry, honey mesquite, graythorn, littleleaf sumac, poison ivy, and woolly buckthorn (Baltosser 1989).

This species is present in New Mexico from mid-March to early September. At Guadalupe Canyon, two broods per year may be attempted, in association with two peak periods of nectar availability. The first period is mid-April to mid-June, when Mohave beardtongue is the major nectar producer. The second period lasts from late June to early September, when nectar supply is more evenly distributed; primary nectar producers are agaves (Baltosser 1989).

## Conservation Status

### Species Assessment

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

Broad-billed Hummingbird is a Biodiversity Conservation Concern, Level 2 species for New Mexico, with a combined vulnerability score of 13. It receives a high vulnerability score of 4 from PIF for its relatively small breeding and nonbreeding distribution. In the state of New Mexico, Broad-billed Hummingbird is listed as threatened by New Mexico Department of Game and Fish.

### Population Size

PIF estimates a species population of 2 million, less than 5% of which occurs in the United States. Size of the New Mexico population is unknown but small, and limited to a single breeding location.

## **Population Trend**

Almost no BBS data exist for this species, and trends are uncertain. NMPIF assigns a score of 2, indicating a stable or moderately increasing local population trend.

## **Threats**

The primary threat to this species in the southwest is further loss of riparian habitat. The New Mexico population is vulnerable due to its small size and restriction to a single known breeding location. Breeding habitat at Guadalupe Canyon is vulnerable to human disturbance, grazing, and potentially to long-term declines in productivity due to drought.

## **Management Issues and Recommendations**

Management for Broad-billed Hummingbirds in New Mexico should focus on maintaining the quality and integrity of riparian and adjacent shrub slope habitat in Guadalupe Canyon, and elsewhere in the Peloncillos.

## **NMPIF Recommendations**

- Maintain habitat in Guadalupe Canyon, including vegetative structure and floral composition required for successful nesting.
- Manage grazing in this area as cool-season only, or by temporary exclusion, as conditions warrant.
- Avoid prescribed burns in this area.

## **Species Conservation Objectives**

### **NMPIF Objectives**

- Maintain or increase known populations in Guadalupe Canyon.

## **Sources of Information**

Baltosser, W. H. 1989. Nectar availability and habitat selection by hummingbirds in Guadeloupe Canyon. *Wilson Bull.* 101:559-578.

Parmeter, J., B. Neville, and D. Emkalns. 2002. *New Mexico Bird Finding Guide*. New Mexico Ornithological Society, Albuquerque, NM.

Powers, D. R., and S. M. Wethington. 1999. Broad-billed Hummingbird (*Cynanthus latirostris*). *In The Birds of North America*, No. 430 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.