

Black-chinned Hummingbird (*Archilochus alexandri*)

NMPIF level: Species Conservation Concern, Level 2 (SC2)

NMPIF assessment score: 15

NM stewardship responsibility: High

National PIF status: No special status

New Mexico BCRs: 16, 18, 34, 35

Primary breeding habitat(s): Middle Elevation Riparian, Southwest Riparian

Other habitats used: Pinyon-Juniper Woodland, Urban

Summary of Concern

Black-chinned Hummingbird is widespread across the interior western United States, but it is most abundant in the southern portion of its range, particularly in southern Arizona, New Mexico, and Texas. In New Mexico, the species is most often associated with riparian woodlands. The large percentage of the global population found in New Mexico makes the preservation of riparian habitat a necessity. Black-chinned Hummingbird is an important pollinator rangewide and is the primary or only pollinator for many plant species.

Associated Species

Southwestern Willow Flycatcher (SC1), Bell's Vireo (SC1), Bewick's Wren, Summer Tanager (BC2), Spotted Towhee, Blue Grosbeak, Bullock's Oriole (SC2)

Distribution

Black-chinned Hummingbirds breed from extreme southern interior British Columbia, south to the east of the Cascade Mountains through Washington and Oregon, Idaho, western Montana, Nevada, Utah, western and southern Colorado, Arizona, and New Mexico to northern Mexico, and east through central and south Texas (Baltosser and Russell 2000).

In New Mexico, the species breeds in lowland and middle elevation riparian and residential areas statewide, but is less numerous on the far eastern plains (Parmeter et al. 2002).

Ecology and Habitat Requirements

Black-chinned Hummingbirds use a wide range of habitats, including riparian woodlands, lush urban vegetation, pinyon-juniper, and xeric desert washes (Kingery 1998, Baltosser and Russell 2000). In New Mexico, the species most often breeds in riparian areas dominated by cottonwood, sycamore, and willow. In southwestern New Mexico, the species is often found in relatively open areas interspersed with clumps of sycamore and cottonwood. Along the Gila River, the species nests in areas dominated by cottonwood, maple, and willow with an understory of Porter's wild lovage and great ragweed (Baltosser 1986). Along the Rio Grande, the species nests most frequently in areas dominated by mature cottonwoods, and densities are thicker where there is a moderate to dense understory of shrubs (Hawks Aloft Inc., unpublished data). Nesting also occurs in urban areas with tall trees and numerous flowering plants.

Black-chinned Hummingbirds are present in New Mexico from April to September (Parmeter et al. 2002). Nesting begins in mid- to late-April in southern New Mexico with a second nesting period peaking in mid-July (Baltosser 1986). Two broods per season are common. Renesting may take place near a successful first brood. Second nesting attempts are occasionally initiated while still feeding large nestlings or recently-fledged young (Baltosser and Russell 2000). Habitats at higher elevations and those lacking access to artificial feeders may have only one nesting season. Nests are generally 1 to 6 m above ground, and are often placed on overhanging branches of cottonwoods or other deciduous trees. Clutch size is almost always 2, though clutch size ranges from 1 to 3. Diet consists of nectar from flowers, small insects and spiders, and sugar water from feeders if available.

Conservation Status

Species Assessment

DISTRIBUTION	5
THREATS	2
GLOBAL POPULATION SIZE	3
LOCAL POPULATION TREND	2
IMPORTANCE OF NEW MEXICO TO BREEDING	3
COMBINED SCORE	15

Black-chinned Hummingbird is a Species Conservation Concern, Level 2 species for New Mexico, with a total assessment score of 15. It receives high vulnerability scores of 5 from PIF for its small non-breeding distribution.

Population Size

PIF estimates a total species population of 2 million, approximately 90% of which breeds in the United States. Size of the New Mexico population is estimated at 18.3% of the species population, or about 400,000 birds. Breeding densities vary rangewide, but are highest in Arizona, New Mexico, and Texas. In southeastern Arizona and southwestern New Mexico, densities ranged from 14 nests/40 ha to 128 nests/40 ha (Baltosser and Russell 2000). Densities also fall within this range along the middle Rio Grande in areas with mature cottonwoods and at least a moderate assemblage of understory trees and shrubs. Along the Gila River, New Mexico, densities varied from 7 to 18 individuals/40 ha in cottonwood-maple habitat (Baltosser 1986).

Population Trend

BBS data indicate both increases and decreases in different regions and over different time periods. Overall trends for both the United States and New Mexico appear to be stable or slightly increasing, although there are some deficiencies in the BBS data. BBS data for 1966-2006 are:

	Annual Trend (%)	P-value	Number of Routes
New Mexico	3.3	0.07	21
FWS Region 2	1.0	0.06	106
Western BBS	1.4	0.22	169

Threats

Black-chinned Hummingbird is susceptible to the loss of natural riparian breeding habitat, especially the loss of mature deciduous trees, and potentially the loss of understory vegetation. General threats include predation and competition with other hummingbird species for nectar at certain times of year. Inclement weather can negatively impact nesting success (Baltosser 1986). Strong winds can break branches supporting nests, and the death of well-developed nestlings has been attributed to extended periods of rainy weather.

Management Issues and Recommendations

NMPIF Recommendations

- Maintain riparian breeding habitat, especially areas dominated by cottonwood, sycamore, willow, and associated understory species.
- Encourage hummingbird gardens, urban and residential plantings, but monitor these areas for potentially negative interactions between species (Baltosser and Russell 2000).
- Increase breeding bird surveys to gain a more complete understanding of population trends.

Species Conservation Objectives

NMPIF Objectives

- Maintain or increase the current breeding population.

Sources of Information

Baltosser, W. H. 1986. Nesting success and productivity of hummingbirds in southwestern New Mexico and southeastern Arizona. *Wilson Bulletin* 98:353-367.

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Kingery, H. E. (Ed.) 1998. Colorado breeding bird atlas. Colorado Bird Atlas Partnership, Colorado Division of Wildlife, Colorado Springs, CO.

Parmeter, J., B. Neville, and D. Emkalns. 2002. New Mexico bird finding guide. New Mexico Ornithological Society, Albuquerque, NM.