

Violet-crowned Hummingbird (*Amazilia violiceps*)

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

NMPIF assessment score: 14

National PIF status: No special status

New Mexico BCRs: 34

Primary breeding habitat(s): Southwest Riparian

Other habitats used: Chihuahuan Desert Shrub (foraging)

Summary of Concern

Violet-crowned Hummingbird is primarily of Mexican distribution, which reaches the northern extent of its breeding range in southern Arizona and southwestern New Mexico. The state population is dependent on preservation of quality riparian habitat at the stronghold of its known breeding location, in Guadalupe Canyon in southern Hidalgo County.

Associated Species

Elf Owl (SC1), Brown-crested Flycatcher, Thick-billed Kingbird (BC1), Phainopepla

Distribution

Violet-crowned Hummingbird is resident along the Pacific slope and interior portions of Mexico, from southern parts of Sonora and western Chihuahua south to Oaxaca. In summer, a migratory breeding population extends to northern Sonora and Chihuahua, and a number of locations in southeastern Arizona.

In New Mexico, Violet-crowned Hummingbirds breed regularly only at Guadalupe Canyon in south Hidalgo County. Breeding may also occur in the Animas Mountains, where birds have been observed during the breeding season. Records of over-wintering in southeastern Arizona are becoming more common (Wethington 2002, S. O. Williams, pers. comm.).

Ecology and Habitat Requirements

Across its range in Mexico, Violet-crowned Hummingbird breeds in riparian woodlands, including riparian vegetation in tropical thorn-scrub, thorn forest and deciduous forest. It also occurs in oak woodland, wooded parks or plantations, and scrub-oak vegetation. In the southwestern United States, it occurs almost exclusively from 1,200 to 1,700 m in riparian deciduous forest and woodlands dominated by Arizona sycamore, Fremont cottonwood and willow, in association with various riparian and Sonoran desert shrub species (Russell and Monson 1998, Wethington 2002).

In Guadalupe Canyon, Violet-crowned Hummingbirds typically nest at the edge of the riparian zone, adjacent to xeric hillsides. Most nests were found in relatively open areas interspersed with clumps of mature Arizona sycamore trees. All located nests of this species were found in the outer branches of sycamores. Areas around nest sites typically have a large amount of herbaceous cover, with vegetation including seepwillow, burrobush, honey mesquite, red barberry, little-leaf sumac, ocotillo, agaves and large amounts of grass cover. Nesting in Guadalupe Canyon begins in mid-June and usually extends into September, with only one brood raised per season. The June arrival time here coincides with blooming of Schott's agave, a principal food source (Baltosser 1986, 1989, S.O. Williams, pers. comm.).

Conservation Status

Species Assessment

DISTRIBUTION	4
THREATS	4
GLOBAL POPULATION SIZE	3
LOCAL POPULATION TREND	2
IMPORTANCE OF NEW MEXICO TO BREEDING	1
COMBINED SCORE	14

Violet-crowned Hummingbird is a Biodiversity Conservation Concern, Level 1 species for New Mexico, with a combined score of 14. At the continental level, it receives PIF vulnerability scores of 4 for its limited breeding and non-breeding distribution. From NMPIF, it receives a score of 4 for threats to breeding in the state. Violet-crowned Hummingbird is listed as threatened in the state of New Mexico.

Population Size

PIF estimates a species population of 2 million. In Mexico, this species is considered fairly common across much of its range. Local populations in the southwestern United States are small, though the

species occurs at multiple locations in Arizona and may be expanding its range there. The New Mexico breeding population at Guadalupe Canyon consists of roughly a dozen individuals (S. O. Williams, pers. comm.).

Population Trend

No BBS data are available. Populations in Arizona and New Mexico appear to be stable or increasing (Wethington 2002).

Threats

Violet-crowned Hummingbird is not considered threatened across its range in Mexico, but the state population is highly vulnerable due to its small size and being restricted to a single known breeding location. Breeding habitat at Guadalupe Canyon is vulnerable to human disturbance, grazing, lack of suitable riparian vegetation, and potentially to long-term vegetative degradation due to drought.

Management Issues and Recommendations

Management options for this species are limited to protecting breeding habitat at Guadalupe Canyon.

NMPIF Recommendations

- Maintain existing restrictions on access at Guadalupe Canyon.
- 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 the current population in the Guadalupe Canyon.
- Survey for other possible breeding locations in southwestern New Mexico.

Sources of Information

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

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

Russell, S. M., and G. Monson. 1998. *The birds of Sonora*. Univ. of Arizona Press, Tucson, AZ.

Wethington, S. M. 2002. Violet-crowned Hummingbird (*Amazilia violiceps*). *In* *The Birds of North America*, No. 688 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, PA.