

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Animal Abstract**

**Element Code:** ABNUC29150

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Ramosomyia violiceps*

**COMMON NAME:** Violet-crowned Hummingbird

**SYNONYMS:** *Leucolia violiceps*, *Amazilia violiceps*, *Amazilia verticalis*, *Trochilus verticalis*, *Cyanomyia violiceps*

**FAMILY:** Trochilidae

**AUTHOR, PLACE OF PUBLICATION:** *Trochilus verticalis* "Lichtenst." W. Deppe, Preis.-Verz. Saugeh ...Vog. ... Mexico, 1830, p. 1. (No locality given = Veracruz.) (AOU 1957).

**TYPE LOCALITY:** SYNTYPE: Oaxaca, Mexico

**TYPE SPECIMEN:** SYNTYPE: NHMUK 3426904. Auguste Salle, July 25, 1888.

**TAXONOMIC UNIQUENESS:** Two species in the genus, *Ramosomyia violiceps* and *R. viridifrons*. These species were formerly placed in *Amazilia* and then in *Leucolia* (AOU 1983, 1998, Stiles et al. 2017, Chesser et al. 2021). However, the type species of the latter is *Leucippus fallax* (Bourcier 1843,(Buffy Hummingbird)); which makes *Leucolia* unavailable for the genus consisting of *violiceps* and *viridifrons* (Bruce and Stiles 2021, Chesser et al. 2022).

The name *A. verticalis*, often used for this species, has been relegated to the synonymy of *A. cyanocephala* (AOU 1983). *Ramosomyia violiceps* and *R. viridifrons* sometimes are considered conspecific, but they occur in apparent sympatry in Guerrero and Oaxaca without evident hybridization (AOU 1998). Two subspecies are recognized, *R. v. ellioti* and *R. v. violiceps* (NatureServe 2022). The subspecies occurring in the Arizona is *R. v. ellioti* (Cornell Lab of Ornithology 2019).

**DESCRIPTION:** A large hummingbird measuring 11 cm (4.5 in) in length, and 5.2-6.0 g in weight. Sexes are similar; bronzy green above and clean white below. Adults have an iridescent purple-blue crown with a small white spot behind the eye. Immature birds exhibit partially brown heads with some violet on crown and hindneck. This species lacks a colorful gorget, and has a clean white throat. The long bill is relatively straight, and bright reddish-orange with a black tip (Cornell Lab of Ornithology 2019).

**AIDS TO IDENTIFICATION:** The combination of clean white underparts and orange bill distinguishes this hummingbird from any other found in Arizona.

**ILLUSTRATIONS:**

Color drawing (National Geographic Society, 1999: p. 265)

Color drawing (Peterson, 1990: p. 221)

Color photo (Farrand, 1988: p. 313)

Color photos (Dan True, <http://www.hummingbirds.net/violetcrowned.html>, 2002)

Color photo (Tim Zurowski, eNature.com, 2002)

Color photos and B&W drawing (Tyrrell and Tyrrell, 1985: pp. 34-35)

**TOTAL RANGE:** Northern Sonora, southern Arizona (local), southwestern New Mexico (local) and western Chihuahua south to Oaxaca, Puebla, Hidalgo, and Guerrero (at least seasonally), Mexico. Casual or accidental in southern California, west Texas, and central Arizona. Northern breeding populations may move south for winter. (NatureServe 2022).

**RANGE WITHIN ARIZONA:** Nesting confirmed in Cochise, Graham, Pima, and Santa Cruz Counties. Nest sites are confirmed in Patagonia, College Peaks, Aravaipa Canyon, and in the Chiricahua, Huachuca, Whetstone, and Peloncillo Mountains. Suspected nesting areas include Catalina, Baboquivari, Santa Rita, and Mule Mountains, Canelo Hills, Bisbee, and parts of the San Pedro River valley (Monson and Phillips 1964, Johnson 1987, Arizona Breeding Bird Atlas 2001, Cornell Lab of Ornithology 2019). Some individuals overwinter in Arizona. Vagrant records to central Arizona (Prescott) (Monson and Phillips 1964).

## **SPECIES BIOLOGY AND POPULATION TRENDS**

**BIOLOGY:** The common call is a loud chattering, somewhat like that of a Broad-billed Hummingbird, but louder, drier, and harder. Male's song is a series of sibilant *ts* notes (National Geographic Society, 1999).

Breeding populations in the United States and northern Sonora are typically migratory, but in the remainder of the range populations are assumed to be residents (Cornell Lab of Ornithology 2019). This species is classified as a wanderer rather than a resident, using a "trapline" of flowers rather than being territorial, but territoriality is not well-defined or well-studied (Cornell Lab of Ornithology 2019). Dominance hierarchy in hummingbirds is strongly tied to body size. The Violet-crowned Hummingbird is larger than most hummingbirds in Arizona, frequently displacing other species at nectar sources. Blue-throated Mountain Gems frequently displace Violet-crowned Hummingbirds and Rivoli's hummingbirds may displace Violet-crowned Hummingbirds at nectar sites (Martinez and Eguiarte 1987).

**REPRODUCTION:** In Arizona and New Mexico, breeding has been documented from May to September. In Guadalupe Canyon nesting begins mid to late Jun and typically extends into September, with only one brood being produced per season (Baltosser 1986, 1989). Nest cycle is 42 days. Almost all nests in Arizona have been found in sycamore trees between 7 and 12 m above ground (Zimmerman and Levy 1960). Clutch size is two. Females are presumed to do all incubation, and average incubation of nest for 75% of daylight hours (Baltosser 1996). Nest is

a cup of cottony plant down and spider webs, externally decorated with lichens, seeds, and leaves (Johnson 1987).

Young are altricial and all care is provided by female. Young are fed via regurgitation (Baltosser 1996).

**FOOD HABITS:** Feeds on nectar and arthropods. These birds take nectar from a variety of flowering plant species, usually while hovering in flight. Small insects and spiders are caught in the air by hawking, or gleaned from foliage (Howell and Webb 1995, Weller 1999). This species will readily visit feeders, and is known to winter in the United States only where feeders are available (Cornell Lab of Ornithology 2019).

**HABITAT:** The array of habitats used by this hummingbird in Mexico is quite varied. However, in the United States, the species is found almost exclusively in riparian deciduous forests and woodlands dominated by Arizona sycamore, Fremont cottonwood, and willow (Baltosser 1989, DeGraaf and Rappole 1995).

**ELEVATION:** In Arizona, breeds from about 1200 - 1700 m (3,940 - 5,600 ft). Farther south, this species has a wider elevational range and may be encountered from 200 – 2400 m (660 – 7,900 ft) (Cornell Lab of Ornithology 2019).

**PLANT COMMUNITY:** Riparian deciduous forest and woodlands dominated by Arizona sycamore, Fremont cottonwood (*Populus fremontii*), and willow (*Salix* sp.). Other plant species include velvet ash (*Fraxinus velutina*), Arizona walnut (*Juglans major*), big-tooth maple (*Acer grandidentatum*), netleaf hackberry (*Celtis reticulata*), soapberry (*Sapindus saponaria*), juniper (*Juniperus* sp.), oak (*Quercus* sp.), honey mesquite (*Prosopis glandulosa*), red barberry (*Berberis haematocarpa*), little-leaf sumac (*Rhus microphylla*), graythorn (*Ziziphus obtusifolia*), ocotillo (*Fouquieria splendens*), and agaves (*Agave schottii* and *A. parryi*)

**POPULATION TRENDS:** No information for most of range. Populations in Arizona and New Mexico appear stable, with a possible recent range expansion in Arizona (Johnson 1987).

## **SPECIES PROTECTION AND CONSERVATION**

<b>ENDANGERED SPECIES ACT STATUS:</b>	None
<b>STATE STATUS:</b>	2 (AZGFD, AWCS 2022) [1B (AGFD SWAP 2012)] [WSC (AGFD, WSCA 1996 in prep)] [Candidate (AGFD, TNW 1988)]
<b>OTHER STATUS:</b>	Forest Service Sensitive (USDA, FS Region 3 1999, 2007, 2013)

**MANAGEMENT FACTORS:** Introduction of exotic plants and establishment of hummingbird feeders is likely responsible for recent overwintering records and possible breeding range expansion in Arizona. Habitat destruction, especially the loss of riparian areas containing sycamore trees is a major concern for northern populations (Cornell Lab of Ornithology 2019).

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** Life history and ecology are poorly known. Research into breeding-habitat requirements throughout the range of the species, movement patterns, and behavioral patterns as they relate to food availability would be useful to better understand this species (Cornell Lab of Ornithology 2019).

**LAND MANAGEMENT/OWNERSHIP:** USFS - Coronado National Forest; State Land Department; TNC - Patagonia-Sonoita Creek and Ramsey Canyon; Private.

**SOURCES OF FURTHER INFORMATION**

**REFERENCES:**

- American Ornithologists' Union (AOU). 1957. Check-list of North American birds. Fifth edition. American Ornithologists' Union, Port City Press. Baltimore, Maryland. pp. 305-306.
- American Ornithologists' Union (AOU), Committee on Classification and Nomenclature. 1983. Check-list of North American birds. Sixth edition. American Ornithologists' Union, Allen Press, Inc. Lawrence, Kansas.
- American Ornithologists' Union (AOU), Committee on Classification and Nomenclature. 1998. Check-list of North American birds. Seventh edition. American Ornithologists' Union, Washington, D.C.
- Arizona Breeding Bird Atlas [BBA] 1993–2001 unpubl., SMW.
- Arizona Game and Fish Department. 1988. Threatened native wildlife in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. p. 19.
- Arizona Game and Fish Department. 1996, in prep. Wildlife of special concern in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. p. 19.
- Arizona Game and Fish Department. 2012. Arizona's State Wildlife Action Plan 2012-2022. Arizona Game and Fish Department, Phoenix, Arizona. 233 pages.
- Arizona Game and Fish Department. 2022. Arizona Wildlife Conservation Strategy: 2022-2032. Arizona Game and Fish Department, Phoenix, Arizona. 378 pages.
- Baltosser, W. H. (1986). Nesting success and productivity of hummingbirds in southwestern New Mexico and southeastern Arizona. *Wilson Bulletin* 93:353-367.
- Baltosser, W. H. (1989). Nectar availability and habitat selection by hummingbirds in Guadalupe Canyon. *Wilson Bulletin* 101:559-578.
- Baltosser, W. H. (1996). Nest attentiveness in hummingbirds. *Wilson Bulletin* 108:228-245.

- Biota Information System of New Mexico (BISON). 2001. BISON Species Account 040950: Violet-crowned hummingbird (*Leucolia violiceps*). New Mexico Game & Fish. Available at <https://www.bison-m.org/booklet.aspx?SpeciesID=040950> (Accessed: 2002).
- Bruce, M.D. and Stiles, F.G., 2021. The generic nomenclature of the emeralds, Trochilini (Apodiformes: Trochilidae): two replacement generic names required. *Zootaxa*, 4950(2), pp.zootaxa-4950.
- Chesser, R.T., Billerman, S.M., Burns, K.J., Cicero, C., Dunn, J.L., Hernández-Baños, B.E., Kratter, A.W., Lovette, I.J., Mason, N.A., Rasmussen, P.C. and Remsen Jr, J.V., 2021. Sixty-second supplement to the American ornithological society's check-list of North American Birds. *The Auk*, 138(3):p.ukab037.
- Chesser, R.T., Billerman, S.M., Burns, K.J., Cicero, C., Dunn, J.L., Hernández-Baños, B.E., Jiménez, R.A., Kratter, A.W., Mason, N.A., Rasmussen, P.C. and Remsen Jr, J.V., 2022. Sixty-third supplement to the American Ornithological Society's check-list of North American Birds. *Ornithology*, 139(3):p.ukac020.
- Cornell Lab of Ornithology. 2019. All about birds. Cornell Lab of Ornithology, Ithaca, New York. <https://www.allaboutbirds.org> (Accessed: August 19, 2022).
- DeGraaf, R. M., and J. H. Rappole (1995). Neotropical migratory birds: Natural history, distribution, and population change. Cornell University Press, Ithaca, New York, USA.
- Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. The birder's handbook: A field guide to the natural history of North American Birds. Simon & Schuster Inc., New York, New York. p. 324.
- Howell, S. N. G., and S. Webb (1995). A guide to the birds of Mexico and northern Central America. Oxford University Press, New York, New York, USA.
- Johnson, T. B. (1987e). Violet-crowned Hummingbird. *Arizona Wildlife Views* 30:6. Arizona Game and Fish Department, Phoenix Arizona.
- Martinez Del Rio, C. and L. E. Eguiarte. (1987). Bird visitation to *Agave salmiana*: comparisons among hummingbirds and perching birds. *Condor* 89:357-363.
- Monson, G., and A. R. Phillips (1964). A check-list of the birds of Arizona. University of Arizona Press, Tucson, Arizona, USA.
- National Geographic Society. 1999. Field guide to the birds of North America. Third edition. National Geographic Society, Washington, D.C. pp. 264-265.
- NatureServe. 2022. NatureServe Network Biodiversity Location Data accessed through NatureServe Explorer [web application]. NatureServe, Arlington, Virginia. Available <https://explorer.natureserve.org/> (Accessed: August 23, 2022).
- Peterson, R.T. 1990. A field guide to western birds. Third edition. Houghton Mifflin Company. Boston, MA. pp. 220-221.
- Phillips, A., J. Marshall, and G. Monson. 1964. The birds of Arizona. The University of Arizona Press. Tucson, Arizona. pp. 65-66.
- Stiles, F. G., J. V. Remsen Jr., and J. A. McGuire (2017). The generic classification of the Trochilini (Aves: Trochilidae): Reconciling taxonomy with phylogeny. *Zootaxa* 4353:401-424.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.
- USDA, Forest Service Region 3. 2007. Regional Forester's List of Sensitive Animals.
- USDA, Forest Service Region 3. 2013. Regional Forester's List of Sensitive Animals.

- Weller, A. A. (1999). Family Trochilidae (hummingbirds): Violet-crowned Hummingbird *Agyrtria violiceps*. in: J. del Hoyo, A. Elliott and J. Sargatal, (editors). Handbook of the birds of the world, 599. Barcelona: Lynx Edicions.
- Zimmerman, D. A. and S. H. Levy. (1960). Violet-crowned Hummingbird nesting in Arizona and New Mexico. *Auk* 77:470-471.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:****ADDITIONAL INFORMATION:**

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