

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

**Animal Abstract**

**Element Code:** ABPBW01111

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Vireo bellii arizonae*

**COMMON NAME:** Arizona Bell's Vireo

**SYNONYMS:**

**FAMILY:** Vireonidae

**AUTHOR, PLACE OF PUBLICATION:** *Vireo bellii*, Audubon, J.J., 1844. Birds Amer., vol. 7, p. 333, pl. 485. *Vireo bellii arizonae*, Ridgway, Proc. Biol. Soc. Washington 16: 107, September 30, 1903.

**TYPE LOCALITY:** Tucson, Pima County, Arizona.

**TYPE SPECIMEN:** USNM 098790, complete skin of adult male, collected by E.W. Nelson, March 21, 1884.

**TAXONOMIC UNIQUENESS:** There are 38 species of vireo's, 12 of which are reported in North America. There are also 25 subspecies. The Arizona Bell's Vireo is 1 of 3 species in Arizona, and the only subspecies in Arizona.

**DESCRIPTION:** *V.b. arizonae* is a small 4.0-4.75 inch (10-12 cm) bird with drab gray-green plumage above and white to yellow plumage below, with sides and flanks faintly washed with grayish olive-yellow. This bird has a white-eye ring and two pale wing bars, with the lower bar being prominent. The feet and bill are bluish-gray. It has a thickened bill, heavy legs and dark eyes.

**AIDS TO IDENTIFICATION:** The two wing bars are distinct during flight, otherwise it is indistinct and hard to identify when not singing. Its' song has been likened to someone asking a question and then answering it himself. Its' thickened bill, heavy legs and dark eyes may also be used as identification aides. Distinguished from Warbling Vireo (*Vireo gilvus*) by the wing bar(s) and whitish eye-ring (Peterson 1990).

**ILLUSTRATIONS:** Color photo (Terres 1980:913).  
Color photo (Phillips 1964:19).  
Color drawing of species (National Geographic, 1999: p. 309).  
Color drawing of species (Peterson, 1990: p. 285).

**TOTAL RANGE:** Occurs throughout central and southwestern U.S. Frequents the Colorado River corridor from southern Arizona and California, into Mexico. Rare residents of Clark

County, Nevada, southwestern Utah, and a declining resident along the Colorado, Virgin, and Muddy Rivers and isolated springs. They winter south of the U.S.-Mexico border.

**RANGE WITHIN ARIZONA:** Central, southeastern and southwestern Arizona. Predominantly along the Colorado River corridor.

## **SPECIES BIOLOGY AND POPULATION TRENDS**

**BIOLOGY:** The species is an active, rather secretive bird that flicks its tail. Migrants inhabit breeding areas from early May to late September. The species sings as if through clenched teeth, and consists of husky phrases at short intervals: *cheedle cheedle chee! cheedle cheedle chew!* (Peterson 1990).

**REPRODUCTION:** They build their nests in low dense vegetation usually less than 5 feet above the ground. Nests are often located near openings within thickets and often near water. The nest diameter is 6.35-7.62 cm (2.5 –3 in), and is comprised of a variety of intricately woven dried grasses and shredded bark, supplemented with spider web or cocoon silk. Three to five white, speckled eggs are laid in small, bowl-shaped nest. Both parents do the incubating of the eggs for 14 days. The young leave the nest 10-12 days after hatching. Both sexes participate in care and feeding of young through post-fledging. Cowbird nest parasitism affects up to seventy percent of all nests. The vireo abandons the nest if parasitized and reproductive success is lowered. Severe weather and predation also affects productivity.

**FOOD HABIT:** The vireo is an insectivore, feeding on caterpillars, beetles, bees, wasps, and small spiders. This is the only vireo known to eat so many large bulky insects. They move about slowly, taking food from branches and leaves in dense underbrush and shrubs. They are also known to feed on fruit.

**HABITAT:** Inhabits lowland riparian areas, with willows, mesquite and seepwillows. The vireo prefers dense, low, shrubby vegetation in riparian areas.

**ELEVATION:** Below 1,066m (3,500 ft).

**PLANT COMMUNITY:** Lower Sonoran zone in desert riparian communities.

**POPULATION TRENDS:** Arizona Bell's vireo is still common in many parts of the state but is drastically reduced in others. North American Breeding Bird Survey data indicate significant survey wide declines averaging 3.2% per year.

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None  
**STATE STATUS:** None (AZGFD, AWCS 2022)  
[1B (AGFD SWAP 2012)]

**OTHER STATUS:**

Not Forest Service Sensitive in AZ, Sensitive in NM (USDA, FS Region 3 2007, 2013) [Forest Service Sensitive (USDA, FS Region 3 1999)]

**MANAGEMENT FACTORS:** This bird is threatened by loss and degradation of its habitat through human and human-induced activities and by nest parasitism of the brown-headed cowbird. Adverse impacts to vireo habitat result from water projects, severe flooding due to water releases from dams, clearing of land for urban and suburban development and for agriculture, pesticides, human disturbance (e.g., illegal camping), fire in riparian habitat, OHVs, livestock impacts to tree saplings, and invasion of non-native plants (e.g., tamarisk and giant reed). (CDFG 2000).

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** Studies/projects needed include: support the protection of riparian habitat; perform a complete inventory of the Arizona Bell's vireo population throughout Arizona to serve as a baseline and then monitor some samples of the population at fixed intervals; study the reproductive success in areas supporting different densities to assess the effects of cowbird parasitism; and initiate habitat improvements on the National Wildlife Refuges along the Colorado River.

**LAND MANAGEMENT/OWNERSHIP:****SOURCES OF FURTHER INFORMATION****REFERENCES:**

- American Ornithologists' Union (AOU). 1957. Check-list of North American birds. Fifth edition. Port City Press, Inc., Baltimore, Maryland. pp. 466-477.
- 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.
- National Geographic. 1999. Field guide to the Birds of North America. Third edition. National Geographic, Washington D.C. pp. 308-309.
- Peterson, R.T. 1990. A field guide to western birds. Third edition. Houghton Mifflin Company, Boston, Massachusetts. pp. 284-285.
- Phillips, A., J. Marshal and G. Moson. 1964. The birds of Arizona. The University of Arizona Press, Tucson, Arizona. pp. 142-143.
- Pima County Parks and Recreation Department. Cienega Creek Natural Preserve bird checklist. 9/3/92.
- Pima County Flood Control District and ENTRANCO. 1988. Biological studies: High plains effluent recharge project, Marana, Pima County, Arizona. Appendix B.
- Terres, J.K. 1980. Encyclopedia of North American birds. Alfred A. Knopf, New York, New York. pp. 950-955.

Terrill, S.B. et al, 1980. Comments concerning the current status and distribution of the Bell Vireo (*Vireo bellii*) in Arizona, Unpublished report, Arizona State University.  
USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.

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

**Revised:** 2002-02-11 (AMS)  
2002-02-26 (SMS)  
2023-01-04 (MBL)

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