
DEPARTMENT OF THE INTERIOR**Fish and Wildlife Service****50 CFR Part 17****Endangered and Threatened Wildlife and Plants; Proposal To Determine the Black-Capped Vireo To Be an Endangered Species****AGENCY:** Fish and Wildlife Service, Interior.**ACTION:** Proposed rule.

SUMMARY: The Service proposes to list the black-capped vireo (*Vireo atricapillus*) as an endangered species under provisions of the Endangered Species Act of 1973, as amended. This small bird formerly bred from Kansas through Oklahoma and Texas to central Coahuila in Mexico. The vireo population is declining. It no longer occurs in Kansas, is gravely endangered in Oklahoma where it was found in only three small areas in 1986, and is no longer found in several parts of its former range in Texas. The black-capped vireo is threatened by brown-

headed cowbird (*Molothrus ater*) nest parasitism and by loss of habitat due to such factors as urbanization, grazing, range improvement, and succession. This proposal, if finalized, will implement the protection provided by the Endangered Species Act of 1973, as amended, for *Vireo atricapillus*. The Service seeks data and comments from the public on this proposal.

DATES: Comments from all interested parties must be received by March 12, 1987. Public hearing requests must be received by January 26, 1987.

ADDRESSES: Comments and materials concerning this proposal should be sent to the Regional Director, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103. Comments and materials received will be available for public inspection during normal business hours, by appointment, at the Service's Regional Office of Endangered Species, 500 Gold Avenue SW., Room 4000, Albuquerque, New Mexico.

FOR FURTHER INFORMATION CONTACT: Alisa Shull, Endangered Species Biologist, Albuquerque, New Mexico (see **ADDRESSES** above) (505/766-3972 or FTS 474-3972).

SUPPLEMENTARY INFORMATION:

Background

The black-capped vireo is a small (4 inches), insectivorous bird that was described as a new species by Woodhouse (1852). He first discovered the species when he collected two specimens on May 26, 1851, along the Rio San Pedro (now called Devil's River) in Sutton County, Texas (Deignan 1961).

The adult male black-capped vireo is olive green on the upper surface, white beneath, with flanks faintly yellowish green. The crown and upper half of the head is black with a partial white eye-ring and lores. This pattern is unique in the family Vireonidae. The iris is brownish red, the bill black. The adult female is duller colored with the crown slate gray instead of black and the underparts washed with greenish yellow (Marshall *et al.* 1985).

The black-capped vireo formerly bred from Kansas through Oklahoma and Texas to central Coahuila in Mexico with an outlying, possibly temporary, colony in Nuevo Leon. Winter residents ranged from Sonora to Oaxaca, Mexico, but occurred mostly in Sinaloa and Nayarit. The species disappeared from Kansas after 1953 (Grzybowski *et al.* 1984, Marshall *et al.* 1985). Graber (1961) believed that land use (grazing) and

climatic conditions (drought) had made the former habitat in southern Kansas unsuitable. The northernmost breeding areas found by her, from 1954 to 1956, were in northern Oklahoma. The present breeding range is from Blaine County in central Oklahoma south through Dallas, the Edwards Plateau, and Big Bend National Park in Texas to at least the Sierra Madera in central Coahuila, Mexico (Marshall *et al.* 1985).

In 1986, only 44-51 adult birds were located in Oklahoma (Grzybowski, pers. comm.) and were limited to three small areas. Only 35-39 birds were found there in 1985 when limited cowbird control measures were started (Grzybowski 1985a). A total of 280 adults were found in 33 places in Texas in 1985; slightly higher numbers of vireos were found at five of these Texas sites in 1986 during survey and cowbird studies (Grzybowski, pers. comm.). Some 24 adults were found in breeding areas in Mexico in 1983-1984 (Marshall *et al.* 1985).

Black-capped vireos and their habitat in the U.S. occur on Federal, State, and private land. The vireo's habitat consists of a few small trees scattered among separated clumps of many shrubs or bushes. The bushes are in the open, and their foliage reaches the ground. Bushes occur in clumps separated by bare ground, rocks, grasses, or wildflowers (Marshall *et al.* 1985). These bushes are the most important requirement for nests, which are mostly 0.5 to 1.0 meter (18-40 inches) above ground and screened from view by foliage (Grzybowski *et al.* 1984). Marshall *et al.* (1985) summarized known nest sites and found that 63 percent of all 164 documented nests were located in four species of shrubs: *Quercus marilandica*, *Q. shumardii texana*, *Q. stellata*, and *Rhus virens*. The remaining 37 percent were found in some 20 other kinds of plants.

Many of the black-capped vireo territories are located on steep slopes, such as the heads of ravines and along sides of arroyos. On such steep, eroded slopes, the shallow soil slows succession and the many micro-climates provided by the rugged terrain perpetuate clumping of vegetation, keeping an area suitable for the vireo (Graber 1961). On level terrain vireo habitat will tend to change, due to succession, to prairie-grass, closed-canopy hardwood forest, or cedar brakes so dense that the necessary understory shrubs will be suppressed (Grzybowski *et al.* 1984). Under natural conditions, some areas of early

successional stage vegetation were present due to wildfires and wildlife grazing. These areas provided black-capped vireo habitat.

The black-capped vireo was included as a category 2 species on the Service's December 30, 1982, Notice of Review (47 FR 58454) but was changed to a category 1 species in the September 18, 1985, Notice of Review (50 FR 37958). Category 1 includes those species for which the Service currently has substantial information to support the biological appropriateness of proposing to list the species.

Summary of Factors Affecting the Species

Section 4(a)(1) of the Endangered Species Act (16 U.S.C. 1531 *et seq.*) and regulations (50 CFR Part 424) promulgated to implement the listing provisions of the Act set forth the procedures for adding species to the Federal Lists. A species may be determined to be an endangered or threatened species due to one or more of the five factors described in section 4(a)(1). These factors and their application to the black-capped vireo (*Vireo atricapillus*) are as follows:

A. The Present or Threatened Destruction, Modification, or Curtailment of Its Habitat or Range

Major threats to black-capped vireo habitat include possible real estate development; grazing by sheep, goats, and other exotic herbivores (which remove vegetation cover near ground level that is necessary for vireo nesting); and range improvement that involves the removal of broadleaved, low bushes (Marshall *et al.* 1985). In addition, any activity that divides the habitat into narrow strips that make the vireo's nest more vulnerable to cowbird parasitism poses a threat (Grzybowski *et al.* 1984).

In the Austin area, which contains the largest known concentration of black-capped vireos, 88 percent of the vireo population is presently threatened by extirpation from development activity and road construction (J. Carrasco *in litt.*). The City of Austin's Department of Planning and Growth Management (DPGM) estimates that most of the habitat for this population will be lost in the next 5 to 10 years, if the anticipated rate of development is realized. The Austin City Manager further states that "proposed development plans and roadway improvement *presently* before the City of Austin for consideration

could eliminate 20 pairs in the immediate (1 to 5 year) future" (J. Carrasco *in litt.*).

In addition, extensive evidence of heavy grazing, trampling, and browsing exists on the Edwards Plateau. In addition to a substantial Angora goat enterprise, the Plateau contains a variety of herbivorous, African game species (Marshall *et al.* 1985).

B. Overutilization for Commercial, Recreational, Scientific, or Educational Purposes

The black-capped vireo is especially attractive to both ornithologists and amateur birders. Nests have failed or been abandoned due to excessive activities of photographers; and a territory was possibly abandoned, in one case, because of frequent harassment from tape-recorded songs (Marshall *et al.* 1985).

C. Disease or Predation

Black-capped vireos are remarkably free of disease and ectoparasites (Graber 1961). However, eggs and young vireos are subject to some predation that is thought by the Service to be normal for this type of bird. Of 134 eggs lost, Graber (1961) found 12 (9 percent) lost to predators, including snakes and a fox squirrel. She also found 16 of 95 hatchlings (17 percent) lost to predators, including snakes and ants. Little evidence of predation on adults exists. The first known instance of predation on an adult occurred in 1985: a female brooding young on a low nest was eaten during the night (Marshall *et al.* 1985).

D. The Inadequacy of Existing Regulatory Mechanisms

The Migratory Bird Treaty Act (16 U.S.C. 703-711) protects this species from being killed or taken captive by persons under U.S. jurisdiction. The black-capped vireo is also proposed for addition as threatened to the Texas State list. However, neither that Act nor the Texas listing provide any protection to the species' habitat.

E. Other Natural or Manmade Factors Affecting Its Continued Existence

Graber (1961) found that 55.1 percent of all black-capped vireo eggs laid were lost before hatching and of this 72.3 percent was due to brown-headed cowbird (*Molothrus ater*) activity. During the nestling period, the chief loss was also due to cowbird parasitism. Cowbirds lay their eggs in vireo nests before the vireo clutch is completed. The cowbird eggs hatch 2-4 days before the vireos and by the time the vireos hatch the cowbird nestlings outweigh them tenfold. In all cases where a cowbird

occupied the nest, no vireo chicks survived (Graber 1961). In a recent study done by Grzybowski (1985b), cowbird nest parasitism was 79 percent in selected areas in Texas and Oklahoma. When cowbird trapping was initiated in those same areas, nest parasitism dropped to 22 percent. Nest success (nests producing vireos) was 14 percent without cowbird removal and 39 percent with cowbird removal.

Man-made changes in landscape and land-use patterns, in particular the opening up of forested areas and the spread of cattle in North America over the past 150 years or so, appear to have favored the brown-headed cowbird. The brown-headed cowbird is an "edge species" and appears to have increased in abundance, range, and the number of species it parasitizes. Cowbirds feed near cattle and agricultural areas and commute daily to areas where they search for nests; therefore, host populations nesting in extensive unbroken tracts may escape parasitism entirely (May and Robinson 1985). With clearing of brush and consequent interspersing of scrub habitats with potentially more suitable cowbird feeding habitats, the vireos may be more accessible to cowbirds than in the past (Grzybowski 1985b).

Natural vegetational succession may also lead to a reduction in vireo habitat. On level terrain with good soil, succession will convert vireo habitat either to prairie grass, closed-canopy hardwood forest, or cedar brakes so dense that the necessary understory shrubs are suppressed (Grzybowski *et al.* 1984).

The Service has carefully assessed the best scientific and commercial information available regarding the past, present, and future threats faced by this species in determining to propose this rule. Based on this evaluation, the preferred action is to list the black-capped vireo (*Vireo atricapillus*) as endangered. A decision to take no action would constitute failure to properly classify this species pursuant to the Endangered Species Act and would exclude it from protection provided by the Act. A decision to propose only threatened status would not adequately reflect the severity of the threats facing this species throughout a significant part of its range and the resulting danger of this species becoming extinct. For the reasons given below, no critical habitat has been proposed for this species.

Critical Habitat

Section 4(a)(3) of the Act, as amended, requires that to the maximum extent prudent and determinable, the Secretary

designate any habitat of a species that is considered to be critical habitat at the time the species is determined to be endangered or threatened. For this particular situation, however, the Service has concluded that there is no demonstrable benefit to the vireo in designating critical habitat and that such an action is not prudent. The black-capped vireo occurs in scattered, small areas; occupied habitat would be difficult to delineate and may vary over time due to succession. Service recovery actions will continuously update and address the vireo's habitat management needs. In addition, as mentioned under "B" in Summary of Factors Affecting the Species, the black-capped vireo is popular among bird-watchers. Possible increased harassment could occur from the required publication of critical habitat descriptions and maps in the Federal Register. Should the Service receive additional information on this subject, which would warrant reconsideration of this decision, the Service could propose critical habitat in the future. Future proposal of critical habitat would require an additional Federal Register publication.

Available Conservation Measures

Conservation measures provided to species listed as endangered or threatened under the Endangered Species Act include recognition, recovery actions, requirements for Federal protection, and prohibitions against certain practices. Recognition through listing encourages and results in conservation actions by Federal, State, and private agencies, groups, and individuals. The Endangered Species Act provides for possible land acquisition and cooperation with the States and requires that recovery actions be carried out for all listed species. Such actions are initiated by the Service following listing. The protection required of Federal agencies and the prohibitions against taking and harm are discussed, in part, below.

Section 7(a) of the Act, as amended, requires Federal agencies to evaluate their actions with respect to any species that is proposed or listed as endangered or threatened. Regulations implementing this interagency cooperation provision of the Act are codified at 50 CFR Part 402 (see revision at 51 FR 19926; June 3, 1986). Section 7(a)(4) requires Federal agencies to confer informally with the Service on any action that is likely to jeopardize the continued existence of a proposed species. If a species is listed subsequently, section 7(a)(2) requires Federal agencies to ensure that activities they authorize, fund, or carry

out are not likely to jeopardize the continued existence of such a species. If a Federal action may affect a listed species, the responsible Federal agency must enter into formal consultation with the Service.

Federal agencies with lands on which vireos have been reported recently include the National Park Service (NPS), Fish and Wildlife Service, and U.S. Army (Fort Hood). Fort Hood personnel have already expressed an interest in protecting this species, and NPS parks and Service refuges are responsible for protecting natural resources. Therefore, little adverse Federal involvement is expected. No Federal activities are known to be presently occurring on the State and private lands containing black-capped vireos.

The Act and implementing regulations found at 50 CFR 17.21 set forth a series of general prohibitions and exceptions that apply to all endangered wildlife. These prohibitions, in part, make it illegal for any person subject to the jurisdiction of the United States to take (including harass, harm, etc.—see definitions at 50 CFR 17.3), import or export, ship in interstate commerce in the course of commercial activity, or sell or offer for sale in interstate or foreign commerce any endangered wildlife species. It also is illegal to possess, sell, deliver, carry, transport, or ship any such wildlife that has been taken illegally.

Certain exceptions apply to agents of the Service and State conservation agencies.

Permits may be issued to carry out otherwise prohibited activities involving endangered wildlife species under certain circumstances. Regulations governing permits are at 50 CFR 17.22. Such permits are available for scientific purposes, to enhance the propagation or survival of the species, and/or for incidental take in connection with otherwise lawful activities.

Public Comments Solicited

The Service intends that any final action resulting from this proposal will be as accurate and as effective as possible. Therefore, any comments or suggestions from the public, other concerned governmental agencies, the scientific community, industry, or any

other interested party concerning any aspect of this proposal are hereby solicited. Comments particularly are sought concerning:

(1) Biological or other relevant data concerning any threat (or lack thereof) to the black-capped vireo;

(2) The location of any additional populations of black-capped vireos and the reasons why any habitat should or should not be determined to be critical habitat as provided by Section 4 of the Act;

(3) Additional information concerning the past or present range and distribution of this species; and

(4) Current or planned activities in the subject area and their possible impacts on this species.

Final promulgation of the regulation on *Vireo atricapillus* will take into consideration the comments and any additional information received by the Service, and such communications may lead to adoption of a final regulation that differs from this proposal.

The Endangered Species Act provides for a public hearing on this proposal, if requested. Requests must be filed within 45 days of the date of the proposal. Such requests must be made in writing and addressed to the Regional Director (see ADDRESSES).

National Environmental Policy Act

The Fish and Wildlife Service has determined that an Environmental Assessment, as defined under the authority of the National Environmental Policy Act of 1969, need not be prepared in connection with regulations adopted pursuant to section 4(a) of the Endangered Species Act of 1973, as amended. A notice outlining the Service's reasons for this determination was published in the *Federal Register* on October 25, 1983 (48 FR 49244).

References Cited

- Deignan, H.G. 1961. Type specimens of birds in the United States National Museum. *Bull. U.S. Natl. Mus.* 221:1-718.
- Graber, J.W. 1961. Distribution, habitat requirements, and life history of the black-capped vireo (*Vireo atricapillus*). *Ecol. Monogr.* 31:313-336.
- Grzybowski, J.A. 1985a. Final report: Population and nesting ecology of the black-capped vireo (*Vireo atricapillus*). Part I: Population status of the black-capped vireo in Oklahoma—1985. Prepared

for the U.S. Fish & Wildlife Service, Albuquerque, NM. 50 pp.

Grzybowski, J.A. 1985b. Final report: Population and nesting ecology of the black-capped vireo (*Vireo atricapillus*). Part II: Nesting ecology of the black-capped vireo. Prepared for the U.S. Fish & Wildlife Service, Albuquerque, NM. 50 pp.

Grzybowski, J.A., R.B. Clapp, and J.T. Marshall. 1984. Interim status report on the black-capped vireo. Prepared for U.S. Fish and Wildlife Service, Albuquerque, NM. 86 pp.

Marshall, J.T., R.B. Clapp, and J.A. Grzybowski. 1985. Status report: *Vireo atricapillus* Woodhouse (black-capped vireo). Prepared for U.S. Fish and Wildlife Service, Albuquerque, NM. 55 pp.

May, R.M., and S.K. Robinson. 1985.

Population dynamics of avian broad parasitism. *Amer. Nat.* 126(4):475-494.

Woodhouse, S.W. 1852. Descriptions of new species of the genus *Vireo*, Veill. and *Zonotrichia*, Swains. *Proc. Acad. Natural Sciences Phil.* 6:60.

Author

The primary author of this proposed rule is Alisa M. Shull, Endangered Species Biologist, U.S. Fish and Wildlife Service, P.O. Box 1306, Albuquerque, New Mexico 87103 (505/766-3972 or FT: 474-3972).

List of Subjects in 50 CFR Part 17

Endangered and threatened wildlife, Fish, Marine mammals, Plants (agriculture).

Proposed Regulation Promulgation

PART 17—[AMENDED]

Accordingly, it is hereby proposed to amend Part 17, Subchapter B of Chapter I, Title 50 of the Code of Federal Regulations, as set forth below:

1. The authority citation for Part 17 continues to read as follows:

Authority: Pub. L. 93-205, 87 Stat. 884; Pub. L. 94-359, 90 Stat. 911; Pub. L. 95-632, 92 Stat. 3751; Pub. L. 96-159, 93 Stat. 1225; Pub. L. 97-304, 96 Stat. 1411 (16 U.S.C. 1531 *et seq.*)

2. It is proposed to amend § 17.11(h) by adding the following, in alphabetical order under Birds, to the List of Endangered and Threatened Wildlife:

§ 17.11 Endangered and threatened wildlife.

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(h) * * *

Species		Historic range	Vertebrate population where endangered or threatened	Status	When listed	Critical habitat	Special rules
Common name	Scientific name						
Birds
Vireo, black-capped	<i>Vireo atricapillus</i>	U.S.A. (KS, LA, NE, OK, TX), Mexico.	Entire	E		NA	NA