

mate has built). Dawson (*in* Bent, U.S. Natl. Mus. Bull. 179, 1942) describes what seems to have been a display of this sort performed by a male Vermilion Flycatcher not near a female.

Financial support during the period in which these observations were made was provided by National Science Foundation grants G19 261 and B17 206.—W. JOHN SMITH, *Department of Biology, University of Pennsylvania, Philadelphia, Pennsylvania 19104, 1 November 1966.*

Nests of the Common Bush-Tanager and the Scaled Antpitta.—A recent paper by J. Stuart Rowley (Proc. Western Found. Vert. Zool., Vol. 1, No. 3:107–204, 1966) includes a description of a partially completed and abandoned nest of the Common Bush-Tanager (*Chlorospingus ophthalmicus*), and indicates that there are still no published data concerning any occupied nest of this species.

I observed such a nest on 25 April 1956, placed on the ground on a high cut-bank along the highway about three miles east of the center of Villa Juárez, Puebla, México. At that time I verified the ownership of the nest by observing the Bush-Tanager as it entered the nest. On 2 May 1956 the nest contained three eggs, and the Bush-Tanager was again observed at the nest. The cut-bank was high, steep, rocky, and densely overgrown with small ferns, mosses, and grasses, with a very few small woody shrubs, and a rather large tree-fern high on the bank. Remnants of cloud forest were adjacent to the bank. The nest was about 25 feet above the level of the highway, and was a horizontal cup about 3.5 inches in outside diameter and about 2 inches in inside depth, situated among ferns and mosses, and nearly roofed over by naturally growing mosses. It was constructed largely of rootlets. The eggs were approximately 16 to 18 mm in length, and were white with many small spots of pale buffy-chestnut, the spots being more numerous around the large end of the egg. The site of this nest was in marked contrast to that of the arboreal nest reported by Rowley (*op. cit.*, p. 196), although the choice of nesting material seems to have been similar.

In a discussion of the Scaled Antpitta (*Grallaria guatemalensis*), Rowley (*op. cit.*, pp. 160–161) correctly assumes that the nest of that species reported by Edwards and Lea (Condor, 57:45–46, 1955) was discovered on 9 August 1950, at which time it contained one egg. The female was collected at this nest on 10 August 1950, and a shelled egg taken from the oviduct. Both of the eggs were pale blue, apparently paler than the "deep robin-egg blue" of the Oaxaca eggs reported by Rowley (*op. cit.*, p. 161).—ERNEST P. EDWARDS, *Department of Biology, Sweet Briar College, Sweet Briar, Virginia 24595, 7 December 1966.*

Nesting of the Black-capped Vireo in the Chisos Mountains, Texas.—The following observations of a nest of the Black-capped Vireo (*Vireo atricapilla*) were made in a narrow, dry canyon in the south slope of Pulliam Ridge in the Chisos Mountains of Big Bend National Park, Texas.

From its mouth upward this canyon gradually decreases in depth from about 100 to 70 feet and in width at floor level from about 150 to 50 feet. The walls and floor of the lower part consist of talus with an open growth mostly of Greg's ash (*Fraxinus greggii*), evergreen sumac (*Rhus virens*), the century plants (*Agave leuchuguilla* and *A. scabra*), ocotillo (*Fouquieria splendens*), prickly pear (*Opuntia* sp.), bear grass (*Nolina erumpens*), and sotol (*Dasyllirion leiophyllum*). Among these shorter plants, especially on the canyon floor, grow scattered junipers (*Juniperus* sp.), pinyon pines (*Pinus* sp.), and small-leaved oaks (*Quercus* sp.). Above 5800 feet sheer granite walls replace the talus slopes. In the cooler and shaded section formed above this elevation there is a decidedly more mesophytic vegetation dominated by a grove of large oaks (probably *Q. gravesii*) with a fairly dense understory of Mexican buckeye (*Ungnadia speciosa*) and hackberry (*Celtis* sp.) entwined with wild grape (*Vitis* sp.).

At approximately 17:00 on 4 May 1966, after having pursued a singing male Gray Vireo (*Vireo vicinior*) up a narrow side canyon, I paused at the top of the east wall of the main canyon above the mesic area and looking down noticed a pair of Black-capped Vireos foraging in the underbrush. The birds moved silently throughout this area for several minutes and then flew



Figure 1. The nest of the Black-capped Vireo in an evergreen sumac. The dried strips of vegetation partly wrapping the exterior and drooping below the nest are of sotol leaves. Photograph by Barlow, 6 May 1966.

south into the xerophytic scrub in the wider part of the canyon. After the birds' departure an hour's search in the area revealed no nest. On 5 May at 18:30, J. Wesley Phillips and I flushed the Black-capped Vireos from a six-foot evergreen sumac growing at 5700 feet on the floor of the drier part of the canyon about 150 feet south of the place where the birds were first seen the day before. In this shrub we found suspended 2.5 feet above the ground from the terminal fork of a short, centrally located, lateral branch a completed but empty nest (fig. 1) that measured as follows: depth (outer), 77 mm, (inner), 58 mm; diameter (at rim, outer), 49 mm, (at rim, inner), 42 mm. Shortly the pair returned, the female diving aggressively within two feet of us. Both birds then flew into nearby dense brush and were lost from view. In the next three days the pair was active in the general vicinity, but no eggs had been laid in the nest by the morning of 8 May when I left the park. On 19 May Phillips frightened the male off three white eggs, and on 27 May R. Roy Johnson found two young, a day or two old, and one egg in the nest.

These observations constitute the first documentation of nesting of the Black-capped Vireo in both the Chisos Mountains and Brewster County, Texas. It is noteworthy that this species frequently has been listed either as breeding in Brewster County, or more specifically in the Chisos Mountains (Bent, U.S. Natl. Mus. Bull., 197:226, 1950; Miller, Condor, 57:172; 1955; A.O.U. Check-list of North American Birds, p. 446, 1957). However, previous records, although pertaining to the breeding season, have not provided evidence of actual nesting. The records in question are: a pair, possibly preparing to nest, collected in the Glass Mountains, 5500 feet, 25 April 1935 (Van Tyne and Sutton, Misc. Publ., Mus. Zool. Univ. Mich., 37:80, 1937); a single bird seen along Lost Mine, 6000 feet, Chisos Mountains, 30 April 1949 (Cruickshank, Wilson Bull., 62:218, 1950); a pair seen at Kibee Springs, 6050 feet, Chisos Mountains, 13 May 1962 (unpubl. records, Big Bend National Park); and a single bird seen on the Window Trail, 5000 feet, the Basin, Chisos Mountains, 15 August 1963 (unpubl. records, Big Bend National Park). Graber (Ecological Monographs, 31:314, 1961), in delimiting the distribution, indicates only that the species has occurred in the county which lies at the western limits of the breeding range. Because no Black-capped Vireos were found there in 1955 and 1956 after a severe drought had depleted shrubby vegetation, Graber concluded that the area provides suitable habitat only in years with normal or above-normal precipitation.



Figure 2. Habitat in the floor of the canyon, 5700 feet, Chisos Mountains, shared by both species of vireos. Evergreen sumac is conspicuous in the foreground as is Greg's ash on the canyon wall in the background. Photograph by Barlow, 7 May 1966.

Until now the nearest reported breeding station in Texas was the mouth of the Pecos River, Valverde County (Bailey, Handbook of the Birds of the Western United States, p. 398, 1917) approximately 120 miles to the east. Confirmed nesting in México is known from a locality 145 miles SSE of the Chisos in the Sierra Madera, near Ocampo, Coahuila (Graber, *op. cit.*). In Graber's opinion, specimens (including males with enlarged testes) taken between late April and early July in the Sierra del Carmen (Miller, *op. cit.*) and the Sierra del Pino (Van Hoose, Wilson Bull., 67:302, 1955), respectively, 40 and 100 miles southeast of the Chisos, may also represent breeding populations.

Ecology. A resident pair of Gray Vireos occupied a territory of about seven acres extending across a drier part of the canyon from west wall to east. The intervening floor contained about two-thirds of the area of four acres comprising the territory of the Black-capped Vireos (fig. 2). The nest of the latter species was nearly in the center of both territories. In the zone of overlap the two species foraged at random from near the ground up to 15 feet in the tops of the tallest trees. However, the Black-capped Vireos did not seek food in the sparsely vegetated upper part of the canyon walls, and the Gray Vireos avoided the steep-walled mesic section of the canyon.

The Black-capped Vireo, known to have shared overlapping territories with White-eyed Vireos (*V. griseus*) and Bell's Vireos (*V. bellii*), has been thought to differ significantly from the Gray Vireo in its choice of habitat (Graber, *op. cit.*). In fact, the Gray Vireo, characterized as an inhabitant of the most arid scrub, has been regarded as ecologically separated from all other vireos (Bent, *op. cit.*). Apparently, there is less ecologic divergence between the two species in question than previously suspected; therefore the habitat in my study area provided features suitable for both vireos.

Behavior. Several times the Black-capped Vireos were observed to forage less than 20 feet from the singing male Gray Vireo. Neither species took notice of the other. In general, a mutual disinterest prevailed, reflecting how effectively the morphological and vocal differences between the two species eliminate interspecific strife, thus facilitating ecologic overlap.

Since she never found any breeding populations smaller than five males and three females, Graber (*op. cit.*) concluded that the Black-capped Vireo is not a solitary species. I did not find any other Black-capped Vireos either nearby or elsewhere in the park, suggesting that the suc-

cessful breeding of an isolated pair of this species is more closely related to the availability of suitable habitat than to seeming gregariousness. However, the male that I observed was not heard to sing in 40 hours of field work between 2 May (prior to the discovery of the pair) and 8 May. This apparent lack of song may have been related to the absence of stimuli normally provided by the presence of other singing males on adjacent territories.

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Cattle Egrets in Ventura County, California.—On 30 October 1966 four Cattle Egrets, *Bubulcus ibis*, were observed at the Point Mugu Game Preserve which adjoins the northeast side of Point Mugu Naval Air Base, Ventura County, California. Point Mugu Game Preserve includes 350 acres of waterfowl habitat, with 230 acres of freshwater ponds divided by dikes. Fifty to 150 cattle are grazed throughout the year on the property.

I am acquainted with the Cattle Egret, having seen it in East Africa. The birds were close to the cattle at all times and moved with them as they grazed. This movement was similar to their behavior pattern among the elephant, Cape buffalo, cattle, and other herd mammals in Africa.

The caretaker at the game preserve stated that he first noticed one Cattle Egret in September 1965, and it stayed with the cattle until March 1966. He did not see it again until September 1966, when four of the birds returned to the preserve.

I saw the birds again on 3 November 1966, and one specimen was collected (W. F. Nichols No. 624, adult ♀ with fully ossified skull), which has been deposited in the Museum of Vertebrate Zoology, University of California, at Berkeley (No. 156676). On 6 November 1966 the Cattle Egrets were observed again, and another was collected (W. F. Nichols No. 625, adult ♀), which is now in the Los Angeles County Museum (No. 61060).

This record of the Cattle Egret in Ventura County, California, appears to document the northward spread of the Cattle Egret in California. This location is 150 miles north of Imperial Beach, San Diego, California, where it was first observed and collected in 1964 (McCaskie, Condor, 67:89, 1965) and 230 miles northwest of the Imperial Valley where it has been observed (Audubon Field Notes, 18:386, 1964 and 19:416, 1965).—WALTER F. NICHOLS, *65 North Madison Avenue, Pasadena, California 91101, 7 November 1966.*

A Record of the Cattle Egret in Humboldt County, California.—Two Cattle Egrets (*Bubulcus ibis*) were observed and photographed as they fed in a pasture on the Arcata Bottoms, approximately two miles northwest of Arcata, Humboldt County, California, on 15 December 1966. They were first reported by Ron Gerstenberg and were later observed by the authors, accompanied by Dave Marshall and Jack Waddell of the U.S. Bureau of Sport Fisheries and Wildlife. The egrets allowed us to approach within 20 feet of them, and we were able to ascertain that the feathers on the head of one bird were washed with a buffy coloration. A local ranch hand stated that he had first noted them in the same field on 13 December 1966.—STANLEY W. HARRIS and CHARLES F. YOCOM, *Humboldt State College, Arcata, California 95521, 11 January 1967.*

A Record of the Cattle Egret in Humboldt County, California.—On 6 July 1966 the senior author obtained an immature Cattle Egret (*Bubulcus ibis*) at McKinleyville, Humboldt County, California. The bird was taken to a veterinarian for treatment of a gunshot wound in its leg and was subsequently placed in the care of the junior author and his wife, under the supervision of the veterinarian. The bird sickened and died about three months later from the effects of its original wounds. The specimen was inadvertently incinerated by the veterinarian