# THE STATUS OF THE BLACK-BILLED CUCKOO (COCCYZUS ERYTHROPTHALMUS (WILSON)) IN TENNESSEE

#### COMPTON CROOK

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Some time ago the writer desired some information on the nesting of the Black-billed Cuckoo in the vicinity of Cookeville, Putnam County, Tennessee. Investigation disclosed little available information on the bird either in that locality or elsewhere in the state. As far as the material actually on record is concerned, this bird seems to be very rare. Possibly one of the reasons for this paucity of records is the general unobtrusiveness of the bird. It is the writer's experience that it migrates quietly, and the field worker seldom hears its high, characteristic yelp, which instantly separates it from the very common Yellow-billed species. Probably many unsatisfactory glimpses are merely noted "Yellow-billed Cuckoo" rather than risk an incorrect identification.

So, it was decided to bring together such material as was available on the status of the bird both as a migrant and as a summer resident, in the hope that this would stimulate further efforts to fill the many gaps in the knowledge of this species in the state. However, there are probably some occurrence dates in the unpublished notes of other observers that the writer did not locate.

Data on comparatively few nests were secured, but locations were so widely scattered that further observation may be able to prove the bird a local summer resident in all of Eastern and most of Central Tennessee. Well-known workers in every section of the state kindly submitted records and impressions, and these the writer presents in

summary in this paper.

First, it may be well to note records already in the literature. Fox (1886), in his "Birds of Roane County, Tennessee," the first published Tennessee list, does not include the bird at all. His work was done in April, 1884, and March and April, 1885. Rhoads (1895, p. 482) states: "Cuckoos were noted at all points visited, except the top of Roan Mountain. From the character of their notes (by which alone the Black-billed species was identified) I judge there were five times as many of the former [Yellow-billed] as of the latter. It is probable, however, that the Black-billed Cuckoo is much less noisy and hence less often observed." Rhoads traveled across the state from Memphis to Roan Mountain in May and June. 1894. Dr. C. Hart Merriam, who made observations at Athens, McMinn County, from July 23-27, 1887, is quoted from an unpublished manuscript by Rhoads

(1.c.), "Coccyzus. Heard several times." The species was not given. Torrey (1896, p. 213) records: "Black-billed Cuckoo, seen twice on Lookout Mountain, May 7 and 8, and once on Walden's Ridge, May 12.".

It may be seen from these quotations that early observers had but few data on the species.

### NESTING

The latest A. O. U. checklist (1931, p. 160) gives the following breeding range for the species: "Breeds mainly in the Transition zone from southern Manitoba, southern Quebec, and Prince Edward Island south to Kansas, Arkansas, North Carolina, and the mountains of Georgia."

References consulted on areas surrounding Tennessee convey the generalized (by the writer) information that the Black-billed Cuckoo is rare around the state's borders, and that breeding records are almost non-existant in the Carolinian divisions of the Upper Austral zone, in which several of our recent Tennessee nests have occurred. Howell (1911, p. 45), writing for Arkansas, says: "The Black-billed Cuckoo is much rarer than the Yellow-billed, and is known to breed in the state only in the Ozark region. The only records are those furnished by Widmann (Birds of Missouri, 1907, p. 118) who says: 'In the Ozarks it is reported as a breeder as far south as Heburn, Cleburn County, Arkansas, by Mr. B. T. Gault in 1888, and at Eureka Springs by Mr. Philo W. Smith, Jr., in 1906." Wheeler (1924, pp. 70-71) gives little additional data for Arkansas, but includes a distribution map showing known breeding territory, including about twelve counties, all clustered on the northern border of the state, in the Ozark region.

In Alabama, Howell (1924, p. 157) notes the following: "The Black-billed Cuckoo, a northern breeding species, occurs in Alabama only as a migrant, and not abundantly." He offers spring records ranging from April 18 to May 9, and gives two fall dates, both

October 16.

On the North Carolina side, Pearson and Brimley (1919, pp. 186-7) write: "... does not seem to be as common a bird in the state as the Yellow-billed. In the mountains Cairns recorded it as some years common and others almost wholly absent." The only breeding records are near the line between the Lower and Upper Austral zones, ap-

parently.

The writer was able to find several nest records for Tennessee, which are summarized here. For Davidson County there are three definite records. On May 3, 1917, a Nashville schoolboy, Tyler Calhoun, reported a nest eight feet up in a sapling growing along an old race track at Battery Lane and Franklin Road, near Nashville. Nest first seen "about a week earlier." The bird was brooding. The nest contents were not ascertained, but both Dr. G. R. Mayfield and Harry C. Monk saw the sitting bird. This is the first Tennessee record of which the writer has knowledge.

On May 16, 1931, Harry C. Monk found a nest of this species on Davidson Road, near Nashville. The bird was brooding two fresh



Photograph by Dr. Jesse M. Shaver.

Fig. 1. Black-billed Cuckoo on nest, Wilkerson Hollow, near Joelton, Davidson County, Tennessee. Retouched to remove some leaves in foreground.

eggs. The finder believed that the bird returned to nest in 1932, an old nest being found nearby in the fall of that year.

Dr. Jesse M. Shaver added Davidson County's third nest record on May 10, 1935, when he located a nest in a buttonbush on Wilkerson's Branch, about two miles from Joelton, Tennessee. This bird also was brooding two fresh eggs. Photographs of this nest and eggs, and of the brooding bird, accompany this note.

On May 12, 1935, Jack Calhoun located two Black-billed Cuckoos at Craggie Hope, Cheatham County. He collected one, a male, which was found to have a brood spot. Thus it may have been nesting. H. O. Todd informed the writer that he recorded a bird near Murfreesboro, Rutherford County, on about June 26, 1935. The lateness of the date would indicate that this bird also was nesting.

Ganier (1923, p. 33) records a nest found near Beersheba, Grundy County, in late May, 1922. The exact date was not recorded. "Blackbilled Cuckoo, nest with two eggs. Several 'Raincrows' heard every day, perhaps both species present."

The writer added another record for the Cumberland Mountains on May 12, 1935. This nest was in Stamp's Hollow, near Monterey, Putnam County, Tennessee, altitude about 1600 feet. The bird was brooding two eggs, slightly incubated. This nest was about five and one-half feet up in a dead sapling, braced by grape, blackberry, and greenbrier vines in the edge of a thicket.

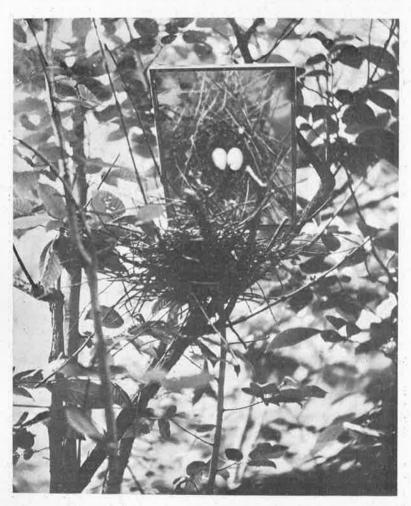
From the region near Johnson City, Tennessee, Lyle and Tyler (1934, p. 51) record two nests, years of discovery not given. "May 22, four eggs incubated two days; June 4, two fresh eggs." Mr. Tyler furnished the writer with the following additional record: "The Black-billed Cuckoo was observed at Shady Valley [near Johnson City], elevation 2700 feet, on June 3, 1935. No nest was found, but likely it was nesting nearby."

It will be noted that the Davidson and Putnam County nests were all in the first half of May, far in advance of the Yellow-billed species' nesting time. The later dates of Ganier and of Lyle and Tyler were obtained at higher altitudes, under Upper Austral or perhaps Transition conditions,

### Migration

The early nest dates would indicate April arrival dates for the species, but the writer could uncover few actual records, and these all late. Oberholser (1931) gives a four-year average of records from Knoxville, Knox County. The average arrival date is April 28; earliest arrival, April 12, 1922. The source of these data is not given. Mr. H. P. Ijams of Knoxville summarized thus his impressions to the writer: "The Black-bill of course nests throughout East Tennessee and is more common in the mountains. On our spring and fall censuses (May and October, usually) we always list it."

A number of spring occurrence records for the Davidson County area and regions adjacent, made by Harry C. Monk, Dr. J. M. Shaver, Dr. G. R. Mayfield, and Jack Calhoun, are included here. Listed from earliest to latest, without regard to year, these follow: May 3,



Photograph by Dr. Jesse M. Shaver,

Fig. 2. Nest and eggs of the Blackbilled Cuckoo, in Wilkerson Hollow. The mirror over the nest is to show the inside of the nest and the two eggs.

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1917, 1 bird (Mayfield); May 8, 1935, 1 bird (Calhoun); May 10, 1935, 1 bird, and May 11, 1935, same bird (Shaver); May 12, 1935, at Craggie Hope, Cheatham County, 2 birds (Calhoun); May 16, 1931, 1 bird, and May 18, 1931, same bird (Monk).

The writer's spring records in Putnam County, 1935, were all in May and are as follows: May 5, Cookeville, 2 birds; May 12, Stamp's Hollow, one mile west of Monterey, 1 bird; May 26, in a small ravine near Stamp's Hollow, 1 bird.

In West Tennessee the bird is very rare, and probably is not a summer resident. From Mr. Ben B. Coffey and Franklin McCamey, of Memphis, two spring occurrence records were obtained: May 18, 1932, a bird found in a dazed condition in downtown Memphis. It was banded and released (Coffey). May 18, 1934, 1 bird, Memphis (McCamey).

The distribution and occurrence of the species in midsummer may only be guessed at, and late summer and fall records are few. The records collected by the writer include none for July in any year. For the Nashville region the definite records follow: August 28, 1932, 1 bird (Monk); September 5, 1922, 1 bird (Shaver); and September 29, 1934, 1 bird (Calhoun). For West Tennessee there are no fall records. However, McCamey has two records for points south of Memphis which may be added here for completeness. These are: Camp Currier, 27 miles south of Memphis, 1 bird on September 16, 1934; Hernando, De Soto County, Mississippi, 1 bird on September 30, 1934. This completes the occurrence records known to the writer.

#### SUMMARY

The Black-billed Cuckoo has been found nesting locally in Eastern and Central Tennessee, with Nashville, Tennessee, apparently the southwestern limit of its breeding range. Seven nests are on record, in the central basin, the Cumberland Mountains, and the edge of the Blue Ridge Mountains. Diligent search will undoubtedly link these widely scattered records.

Indications are that the bird arrives in the state about mid-April, but Dr. Oberholser's paper, previously cited, offers the only actual records to this effect. Other spring records of the bird have been made in early May, usually coincident with the finding of nests. Little is known of the actual abundance of the bird in migration.

Midsummer records are lacking, and late summer and fall records scarce. September 29 is the latest available date recorded for the state, although material from nearby states indicate that it should be found at least a month later. This imperfect picture may speedily be made clearer by attention from the state's field students.

#### LITERATURE CITED

Fox, Wm. H. 1885. List of Birds Found in Roane County, Tennessee, During April, 1884, and March and April, 1885. Auk, 3:315-320.

Ganier, Albert F. 1923. Notes from the Tennessee Cumberlands. Wilson Bulletin, 35:26-34.

Howell, A. H. 1911. The Birds of Arkansas. U. S. Dept. Agri., Biol. Surv., Bull. 38.

Howell, A. H. 1924. 'The Birds of Alabama. Pp. 1-384. Brown Printing Co., Montgomery.

Lyle, Robert B., and Bruce P. Tyler. 1934. The Nesting Birds of Northeastern Tennessee. Migrant, 5:49-57.

Oberholser, Harry C. The Migration of North American Birds, Second Series. Bird-Lore, 33: 249-254.

Rhoads, Samuel N. 1895. Contributions to the Zoology of Tennessee. No. 2. Birds. *Proc. Acad. Nat. Sci.*, *Phila.*, pp. 463-501.

Torrey, Bradford. 1896. Spring Notes from Tennessee. Pp. 1-223. Houghton, Mifflin & Co., Cambridge.

Wheeler, H. E. 1924. The Birds of Arkansas, A Preliminary Report. Ark. Bur. Mines, Manufactures and Agriculture. Received August 14, 1935.

## NOTES HERE AND THERE

Professor S. H. Essary of the Agricultural Experiment Station at Knoxville, died April 28, 1935. His main work was in the field of Plant Pathology. He will be much missed in the State.

The paper which William B. Wendel read before the Reelfoot Lake Meeting of the Academy was published in an abstract form under the title, The Mechanism of the Antidotal Action of Methylene Blue in Cyanide Poisoning, in *Science*, vol. 80, p. 381, and in full under the title, Methylene Blue, Methemoglobin and Cyanide Poisoning, in *Jour. Pharm. Exper. Therap.*, vol. 54, p. 283 (1935).

Dr. A. A. O'Kelley, who read a paper at the Reelfoot Lake Meeting of the Academy on Selenium and Tellurium as Carriers in Bromination of Benzene, published this paper in the *Journal of the American Chemical Association*, vol. 56, p. 2783 (1934).

Dr. Peyton N. Rhodes sends the following abstract of the paper which he presented at the Reelfoot Lake Meeting of the Academy, on Atomic Building Units: "An attempt is made to present to non-physicists some idea of the history, nature, source, and properties of the entities of atomic and sub-atomic dimensions with which so much of present-day research in physics is concerned."