# FIRST NESTING RECORD OF BLACK-BILLED CUCKOO (COCCYZUS ERYTHROPTHALMUS) IN THE LOWER MISSISSIPPI VALLEY

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The Black-billed Cuckoo (*Coccyzus erythropthalmus*) breeds in eastern North America sporadically south to central Oklahorna (Sutton 1967), northern Arkansas (James and Neal 1986), central Tennessee (Nicholson 1997), and northern Alabama (Imhof 1976). An exceptional nesting occurrence in southern Texas (Fischer 1979) anticipates our report of the first nesting record for Louisiana and the lower Mississippi Valley (Lowery 1974, Wiedenfeld and Swan 2000).

On 12 May 1991, Graves observed a Black-billed Cuckoo from state road 975 (2.6 km north of Interstate-10) near the east bank of the Whiskey Bay Pilot Channel of the Atchafalaya River, St. Martin Parish, Louisiana (~30°23' N, 91° 39' W)(cf. Muth 1991). The cuckoo, perched on an electric power line, crushed a dark spiny caterpillar by passing it back and forth between its mandibles and then flew directly to a nest containing two coal-black nestlings in a roadside thicket of blackberries (*Rubus* sp.), tree saplings, and vines adjacent to a large tract of second-growth forest. The fragile platform nest was constructed of twigs in the crown of a dogwood sapling (*Cornus drummondii*), 1.3 m above ground, and partially concealed from lateral view by vines and blackberry canes. The nestlings were fed with caterpillars several times during the next hour. A second Black-billed Cuckoo was heard calling 50-75 m away during

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one feeding, but only one adult at a time was observed at the nest. Several Yellow-billed Cuckoos (*Coccyzus americanus*) were also seen and heard near the nest site.

Kratter, Bates, S. J. Hackett, and R. T. Chesser made additional observations at the nest site on 14 May. An adult was on the nest when they arrived at 0750h, and stayed until 0800h. At 0820h, an adult (color photograph reproduced in Amer. Birds 45:513) returned with a pale lepidopteran larva and perched ~ 6m from the nest. It pummeled the larva against a branch for 5 minutes and then approached to within 2 m of the nest where it perched quietly for 10 minutes. The cuckoo then flew to the nest and quickly departed with either the larva or a fecal sac. The nestlings were covered with shiny feather sheaths, indicating that the young were still less than seven days old (Spencer 1943). The nestlings had dark bills and gape wattles, with bright red mouth linings. Bates and four others returned on 16 May to find the large nestlings attended by an adult. The abandoned nest was collected during a fourth visit on 23 May (deposited in Louisiana State University Museum of Natural Science). Given an incubation period of 10-11 days (Spencer 1943), and allowing a few days for nest construction, nest building must have commenced no later than 27 April. The carliest egg date cited in Hughes' (2001) review of the species was 5 May at Atlanta, Georgia (Burleigh 1958). The Whisky Bay nest site lies ~ 640 km SSE of the nearest recent nesting record in northern Arkansas (James and Neal 1986).

In light of the confirmed nesting record, one subsequent occurrence is worth noting. On 10 May 1994, Graves tape-recorded a calling Black-billed Cuckoo about 0.8 km north of the 1991 nest site in a large tract of deciduous secondgrowth forest (5-7 m tall). Although no evidence of breeding was obtained, the cuckoo called regularly from 10:00 to 11:30 (Central Standard Time) before and after a partial solar eclipse. Black-billed Cuckoos are usually silent during migration and on the wintering grounds (Hughes 2001). Willows (*Salix nigra*) in the area were moderately to heavily defoliated by caterpillars.

Black-billed and Yellow-billed cuckoos are believed to search nomadically for lepidopteran outbreaks, at least in some areas, after arriving on the breeding grounds (Hamilton and Orians 1965, Nolan and Thompson 1975, Sealy 1978, Hughes 2001). We lack data on the temporal and spatial patterns of lepidopteran abundance in the Whiskey Bay area. However, analysis of annual variation in numbers of Yellow-billed Cuckoos recorded on the Atchafalaya (route 905) Breeding Bird Survey (data from 1989-2000; http://www.mbr-pwrc.usgs.gov/ bbs/trend/tmp/t000085334374.html) revealed that cuckoos were no more common during 1991 (n=19 cuckoos) and 1994 (n=11) than during other years (n= 3-27 cuckoos, x = 14.0 + 7.4; t = -0.18; P = 0.85).

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### Literature Cited

BURLEIGH, T. D. 1958. Georgia birds. University of Oklahoma Press, Norman.

- FISCHER, D. H. 1979. Black-billed cuckoo (Coccyzus erythropthalmus) breeding in south Texas. Bulletin of the Texas Ornithological Society 12:25-26.
- HAMILTON, W. J., III, and G. H. ORIANS. 1965. Evolution of brood parasitism in altricial birds. Condor 67:361-382.
- HUGHES, J. M. 2001. Black-billed Cuckoo (Coccyzus erythropthalmus). In The Birds in North America, No. 587 (A. Poole and F. Gill, eds.). The Birds of North America, Inc., Philadelphia, Pennsylvania.

JAMES, D. A., and J. C. NEAL. 1986. Arkansas birds: Their distribution and abundance. University of Arkansas Press, Fayetteville.

- IMHOF, T. A. 1976. Alabama birds. 2<sup>nd</sup> edition. University of Alabama Press, Tuscaloosa.
- LOWERY, G. H. 1974. Louisiana birds. Louisiana State University Press, Baton Rouge.
- MUTH, D. P. 1991. Central southern region. American Birds 45:455-460.

NICHOLSON, C. P. 1997. Atlas of the breeding birds of Tennessee. University of Tennessee Press, Knoxville.

- NOLAN, V. JR., and C. F. THOMPSON. 1975. The occurrence and significance of anomalous reproductive activities in two North American nonparasitic cuckoos *Coccyzus* spp. Ibis 117:496-503.
- SEALY, S. G. 1978. Possible influence of food on egg-laying and clutch size in the Black-billed Cuckoo. Condor 80:103-104.
- SPENCER, O. R. 1943. Nesting habits of the Black-billed Cuckoo. Wilson Bulletin 55:11-21.
- SUTTON, G. M. 1967. Oklahoma birds. University of Oklahoma Press, Norman.
- WIEDENFELD, D. A. and M. M. SWAN. 2000. Louisiana Breeding Bird Atlas. Louisiana Sea Grant College Program, Louisiana State University, Baton Rouge.