

LITERATURE CITED

- BROCKELMAN, W. Y. 1998. Long term ecological research plot for the study of animal diets in Khao Yai National Park. Pages 307–310 in *The Asian hornbills: ecology and conservation* (P. Poonswad, Ed.). Thai Studies in Biodiversity, no. 2. Biodiversity Research and Training Program, Bangkok, Thailand.
- FOGDEN, M. P. L. 1972. The seasonality and population dynamics of equatorial forest birds in Sarawak. *Ibis* 114:307–343.
- FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS. 2003. State of the world's forests 2003. Food and Agricultural Organization of the United Nations, Rome. Online at <<http://www.fao.org/DOCREP/005/Y7581E/y7581e16.htm>> (accessed 18 February 2004).
- HENSLER, G. L. 1985. Estimation and comparison of functions of daily nest survival probabilities using the Mayfield method. Pages 289–301 in *Statistics in ornithology* (D. J. T. Morgan and P. M. North, Eds.). Springer-Verlag, Berlin, Germany.
- HOLMES, R. T., T. W. SHERRY, P. P. MARRA, AND K. E. PETTIT. 1992. Multiple brooding and productivity of a Neotropical migrant, the Black-throated Blue Warbler (*Dendroica caerulescens*), in an unfragmented temperate forest. *Auk* 109:321–333.
- KITAMURA, S., T. YUMOTO, P. POONSWAD, P. CHUAILUA, K. PLONGMAI, T. MARUHASHI, AND N. NOMA. 2002. Interactions between fleshy fruits and frugivores in a seasonal forest in Thailand. *Oecologia* 133: 559–572.
- LAMBERT, F. R. AND N. J. COLLAR. 2002. The future for Sundaic lowland forest birds: long-term effects of commercial logging and fragmentation. *Fork-tail* 18:127–146.
- MAYFIELD, H. F. 1961. Nesting success calculated from exposure. *Wilson Bulletin* 73:255–261.
- OGDEN, L. J. E. AND B. J. M. STUTCHBURY. 1996. Constraints on double brooding in a Neotropical migrant, the Hooded Warbler. *Condor* 98:736–744.
- ROBINSON, W. D., T. R. ROBINSON, S. K. ROBINSON, AND J. D. BRAUN. 2000. Nesting success of understory forest birds in central Panama. *Journal of Avian Biology* 31:51–164.
- ROBSON, C. 2000. Field guide to the birds of Southeast Asia. New Holland, London, United Kingdom.
- STUTCHBURY, B. J. M. AND E. S. MORTON. 2001. Behavioral ecology of tropical birds. Academic Press, London, United Kingdom.

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First Nest Description for the Ocellated Antbird (*Phaenostictus mcleannani*)

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ABSTRACT.—We present the first description of a nest of the Ocellated Antbird (*Phaenostictus mcleannani*), an understory species that ranges from southeastern Honduras to northwestern Ecuador. The open-cup nest was found in June 2002, in the Republic of Panama, and was located on the leaf litter between the buttresses of a *Violu surinamensis* tree. The nest contained two ovoid, whitish eggs with reddish-brown speckles and longitudinal streaks. Received 20 January 2004, accepted 3 August 2004.

The Ocellated Antbird (*Phaenostictus mcleannani*) is a “professional” army ant fol-

lower (*sensu* Willis 1973) that ranges from southeastern Honduras to northwestern Ecuador (Ridgely and Gwynne 1989, Zimmer and Isler 2003). In the Republic of Panama, the Ocellated Antbird is widespread throughout the undergrowth of lowland humid forests and has been recorded at elevations of up to 900 m (Ridgely and Gwynne 1989). Ocellated Antbirds, along with Bicolored Antbirds (*Gymnophrys leucaspis*) and Spotted Antbirds (*Hylophylax naevioides naevioides*), form the core of ant-following assemblages in central Panama (Willis 1973). The Ocellated Antbird is the least common of the three species, is relatively secretive, and is rarely observed away from swarms of army ants (Willis 1973). The natural history of this group is of interest due to its notable vulnerability to habitat fragmentation and isolation; for example, the Oc-

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ellated Antbird became extirpated from Barro Colorado Island in the 1970s (Karr 1982, Robinson 1999). Despite intensive studies of their ecology and behavior (Willis 1973), no confirmed observations of Ocellated Antbird nests have been previously reported. Here, we present what we believe is the first description of this species' nest.

We studied the reproductive ecology of birds on a 104-ha study area (see Robinson et al. 2000 for a full description of the study area) in the lowland forests of Soberania National Park in the Republic of Panama (9° 10' N, 79° 45' W). On 26 June 2000, while checking the buttresses of a medium sized *Virola surinamensis* tree (Family Myristicaceae: ~20 m high, 0.80 m diameter at base of buttresses, and 0.25 m diameter at breast height), AIC flushed an adult Ocellated Antbird and discovered a cup nest built amid the leaf litter on the ground between two of the tree's buttresses. The nest tree was located in forest 60–120 years old (Robinson et al. 2000).

We revisited the nest site on 27 June and measured the nest and eggs. The nest was set on the ground litter and was attached at the rim to the tree buttresses with fungal rhizomorphs (*Marasmius* spp.). The nest itself was a tightly knit cup made from fine fungal rhizomorphs and dried leaves. We did not observe additional lining material. The interior of the cup measured 85 mm in width and 40 mm in depth. The eggs were ovoid and whitish, speckled with reddish-brown spots and longitudinal streaks, much like Bicolored Antbird eggs (Stiles and Skutch 1989). The eggs weighed 5.0 and 4.9 g and both measured 27 mm in length and 20 mm in width at the widest point.

We revisited the nest every 3 days. The nest contained two eggs on 30 June, and on 3 July, we observed two naked hatchlings; their eyes were closed. By 6 July, the hatchlings had feather sheaths, and by 9 July, they were downy and their eyes had opened. On 15 and 16 July, the nest was intact but empty. Although we did not directly observe whether the nestlings fledged successfully or were depredated, a nestling period of approximately 12 days is common for open-cup-nesting antbirds (Willis 1972, Stiles and Skutch 1989).

The nest we observed was similar to descriptions of putative Ocellated Antbird nests

presented by Willis (1973) and Zimmer and Isler (2003). We believe that our observations confirm the Willis (1973) and Zimmer and Isler (2003) nests as those of the Ocellated Antbird.

Most other species in the families Thamnophilidae and Formicariidae attach their open-cup nests to horizontal forks of shrubs or trees (antshrikes, antvireos, some antwrens and antbirds), or build in a hollow or cavity (some antbirds and antthrushes). The Ocellated Antbird's placement of a cup nest on the ground between tree buttresses makes it somewhat unique in these families (Stiles and Skutch 1989, Cadena et al. 2000). Species in the ecologically similar genus, *Phlegopsis*, place their nests inside hollow tree stumps (Cadena et al. 2000). A two-egg clutch is standard for open-cup nesters in the humid tropics (Skutch 1985).

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LITERATURE CITED

- CADENA, C. D., G. A. LONDOÑO, AND J. L. PARRA. 2000. Nesting records of five antbird species from the Colombian Amazon. *Wilson Bulletin* 112: 313–317.
- KARR, J. R. 1982. Avian extinction of Barro Colorado Island, Panama: a reassessment. *American Naturalist* 119:220–239.
- RIDGELY, R. S. AND J. A. J. GWYNNE. 1989. A guide to the birds of Panama: with Costa Rica, Nicaragua, and Honduras. Princeton University Press, Princeton, New Jersey.
- ROBINSON, W. D. 1999. Long-term changes in the avifauna of Barro Colorado Island, Panama, a tropical forest isolate. *Conservation Biology* 13:85–97.
- ROBINSON, W. D., J. D. BRAUN, AND S. K. ROBINSON. 2000. Forest bird community structure in central Panama: influence of spatial scale and biogeography. *Ecological Monographs* 70:209–235.
- SKUTCH, A. F. 1985. Clutch size, nesting success, and predation on nests of Neotropical birds, reviewed. *Ornithological Monographs* 36:575–594.
- STILES, F. G. AND A. F. SKUTCH. 1989. A guide to the

- birds of Costa Rica. Cornell University Press, Ithaca, New York.
- WILLIS, E. O. 1972. The behavior of Spotted Antbirds. Ornithological Monographs, no. 10.
- WILLIS, E. O. 1973. The behavior of Ocellated Antbirds. Smithsonian Contributions to Zoology 144:1-57.
- ZIMMER, K. J. AND M. L. ISLER. 2003. Ocellated Antbird (*Phaenostictus mcleannani*). Pages 680-681 in Handbook of the birds of the world, vol. 8: broadbills to tapaculos (J. del Hoyo, A. Elliott, and J. Sargatal, Eds.). Lynx Edicions, Barcelona, Spain.