

Shorter Contributions

Banisteria, Number 22, 2003

© 2003 by the Virginia Natural History Society

UNUSUAL FORAGING BEHAVIOR OF A YELLOW-BILLED CUCKOO ON ASSATEAGUE ISLAND, VIRGINIA -- On 1 August 2002, I observed an unusual feeding behavior of an immature Yellow-billed Cuckoo (*Coccyzus americanus*) (age evident by absence of yellow in the bill and presence of large white spots on the undertail) on the Woodland Trail of the Chincoteague National Wildlife Refuge on Assateague Island. At about 1700 h, a cuckoo flew onto the branch of a deciduous tree at a height of about 7 m, just above a large Eastern Tent Caterpillar (*Malacosoma americana*) nest > 0.3 m in length. The cuckoo inched along the branch until it was directly over the nest which hung below the branch. It spent approximately 1 min visually inspecting the nest, likely waiting for potential prey to indicate its presence by moving (Hamilton & Hamilton, 1965). It then stretched its body forward apparently trying to obtain a prey item (Bender, 1961). It made two attempts in this way to extract prey but failed both times. It then jumped into the nest from above. It is not clear if the bird jumped through an opening or penetrated the wall of the nest. The cuckoo emerged with a 2.5 cm caterpillar in its bill within several seconds after it jumped. It also reemerged without any nest material covering its body and flew off almost immediately after capturing its prey.

Tent caterpillars weave nests that are closed to protect them from birds and insects (Rabaglia & Twardus, 1990). They are, nevertheless, vulnerable to foraging birds penetrating the nest to gain access. Bent (1940) described an instance of Yellow-billed Cuckoos tearing up a number of these nests in half a day. In view of the fact that the juvenile emerged from the nest without any of the nest material visible on its plumage, it is possible that either it or the adults or both had previously visited this nest and had already created an opening in the tent so that there was access to prey.

Although tent caterpillars are among the favored prey of Yellow-billed Cuckoos (Hughes, 1999), this foraging technique has not previously been reported in the literature on the species. Its most common foraging technique is gleaning insects from leaves and stems, typically while perched, but sometimes while hovering (Hughes, 1999). "Jumping" as a means of attacking prey is not a standard foraging behavior employed by non-raptorial landbirds using terrestrial habitats nor is it among the rare foraging maneuvers previously described for this group of birds (Remsen & Robinson,

1990). Silver Gulls (*Larus novaehollandiae*) use "jump-grabs" as one of several methods for stealing food from Crested Terns (*Sterna bergii*) in Australia. A ground-attacking gull jumps at a low-flying tern in an effort to grab a fish the tern is carrying in its bill (Hulsman, 1984). Likely, the cuckoo was able to capture a prey item by jumping into the nest, perching briefly, and then snatching a larva with its bill.

That an immature bird engaged in this aberrant behavior may reflect its relative inexperience in foraging. The caterpillar nest material represented a potential threat to the bird if it adhered to its plumage and diminished its capacity for flight. Damaged feathers have been shown to affect adversely the capacity for escape in European Starlings (*Sturnus vulgaris*) (Swaddle et al., 1996). Presumably the bird would not have endangered itself by getting tent material on its plumage, although a young bird may not have been able to assess the risks.

ACKNOWLEDGMENTS

I thank Caleb Gordon, Anne Houde, and Jeffrey Sundberg for their comments on an earlier version of this paper, Tim Morton for informing me about tent caterpillar behavior, and Richard Roberts for information about Yellow-billed Cuckoos breeding on Chincoteague NWR.

LITERATURE CITED

- Bender, R. O. 1961. Food competition among closely related sympatric species. *Wilson Bulletin* 73: 214.
- Bent, A. C. 1940. Life Histories of North American Cuckoos, Goatsuckers, Hummingbirds, and their Allies. United States National Museum Bulletin 176. 506 pp.
- Hamilton, W. J., III, & M. E. Hamilton. 1965. Breeding characteristics of Yellow-billed Cuckoos in Arizona. *Proceedings of the California Academy of Sciences* 32: 405-432.
- Hughes, J. M. 1999. Yellow-billed Cuckoo (*Coccyzus americanus*). In A. Poole & F. Gill (eds.), *The Birds of North America*, No. 418, The Birds of North America, Inc., Philadelphia, PA. 28 pp.
- Hulsman, K. 1984. Selection of prey and success of Silver Gulls robbing Crested Terns. *Condor* 86: 130-138.

Rabaglia, R., & D. Twardus. 1990. The Eastern Tent Caterpillar. U.S. Department of Agriculture, Forest Service. www.fs.fed/na/morgantown/fhp/palerts/etc/etc.

Remsen, J. V., & S. K. Robinson. 1990. A classification scheme for foraging behavior of birds in terrestrial habitats. *Studies in Avian Biology* 13: 144-160.

Swaddle, J. P., M. S. Witter, I. C. Cuthill, A. Budden, & P. McCowen. 1996. Plumage condition affects flight performance in Common Starlings--implications for developmental homeostasis, abrasion, and moult. *Journal of Avian Biology* 27:103-111.

William Moskoff
Box M1
Department of Biology
Lake Forest College
Lake Forest, Illinois 60045