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ROOSTING BEHAVIOR OF THREE SPECIES OF WOODCREEPERS (DENDROCOLAPTIDAE) IN BRAZIL

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The roosting behavior of woodcreepers is little known. Skutch (*Condor* 47:85, 1945) found individuals of five species roosting singly in tree cavities. Edwin Willis (pers. comm.) found a Buff-throated Woodcreeper (*Xiphorhynchus guttatus*) roosting alone in a cavity 1 m above the ground on Barro Colorado Island, Panama Canal Zone. Neither author noted the sleeping positions. In Brazil I observed the roosting of three other members of the family.

In the Mocambo Forest Reserve of the IPEAN (Instituto de Pesquisas e Experimentacao Agropecuarias do Norte), Belem, Para, Dr. Charles O. Handley and I observed a Spix's Woodcreeper (*Xiphorhynchus spixii*) roosting. The bird roosted several nights in a cavity about 2 m up in a rotten palm tree stump about 10 cm in diameter, 2.3 m high, and covered with mosses and epiphytes. At 23:00 on 27 March 1968 the bird was perched on the inside wall of the cavity near the entrance hole. When I turned the flashlight on the bird, it was looking at me, moving its head slowly; seconds later it flew to another trunk about 1 m away. Later that evening the Spix's Woodcreeper was seen again roosting in the same hole. Dr. Handley also observed it there on other nights. The Buff-throated Woodcreeper seen by Willis (pers. comm.) behaved in the same way on two different nights.

About 100 m away another rotten stump covered with mosses and epiphytes had a hole about 2.5 m above the ground. A Plain-brown Woodcreeper (*Dendrocincla fuliginosa*) entered the hole several times during the day. At 18:50 on 27 March 1968 it came calling and perched 3 m up on the stump but did not go into the hole, probably because I was nearby.

At 18:30 on 27 April 1968, near a road at Serra do Navio (0°55'N, 52°01'W) in Amapa I observed

another *Dendrocincla fuliginosa* perched on a trunk about 8-10 cm in diameter. The vegetation was dense second-growth forest, very difficult to penetrate. I observed the bird there on subsequent days at about the same time and also later at 20:00. When disturbed by the noise of my approach, it gave short "tcheep-tcheep" calls and moved to another trunk nearby after several seconds.

From April to May 1967, I kept a Straight-billed Woodcreeper (*Xiphorhynchus picus*) in captivity. The bird was captured in a mist net near the edge of the Rio Negro at Pedra do Gaviao, about 1°25'S, 61°15'W (State of Amazonas). Throughout the day it perched on the vertical wall of the cage rather than on horizontal branches in the cage. However, in nature, when looking for food, other woodcreepers such as the Plain-brown Woodcreeper and the Buff-throated Woodcreeper occasionally perch on horizontal branches. At night, *X. picus* perched on the vertical wall and turned its head backward, hiding it in the middle of the fluffed back feathers. According to R. Warner (*Condor* 70:101, 1968), this way of sleeping may keep mosquitoes from biting around the face.

From these observations, it seems that at least one woodcreeper—one inhabiting riverside mosquito-infested habitats—roosts with the head hidden; the others seemed to have their heads out but may have been disturbed by my approach. Unlike other woodcreepers that have been observed, one Plain-brown Woodcreeper roosted outside a cavity on a vertical trunk. This is a species that often follows army ants in forest where tree cavities are scarce. Possibly all these birds are flexible in their roosting requirements. As Skutch (op. cit.) has noted for other woodcreepers, all these birds went to their roosting places late in the afternoon.

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