

ARBOREAL ROOSTING AS A POSSIBLE EXPLANATION FOR TAIL STIFFNESS IN THE GENUS *SCLERURUS*

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Una posible explicación por la rigidez de la cola en el género *Sclerurus*: los tirahojas duermen en árboles.

Key words: Short-billed Leaf-tosser, *Sclerurus rufifigularis*, tail stiffness, arboreal roosting, Furnariidae.

The genus *Sclerurus* comprises six species of largely ground-foraging birds distributed from southern Mexico to northern Argentina. *Sclerurus* have particularly stiff rachides of the tail feathers (Vaurie 1980), which suggests a support function in behavioral traits. We examined four museum specimens; stiff central rachides of three individuals of *S. mexicanus* measured on average 64 ± 1 mm, and the central rachis of one *S. guatemalensis* was 62 mm. Although we have no data for other species, Vaurie (1980) mentions that “The six species of *Sclerurus* are remarkably uniform structurally, with the exception of the bill...” and provides similar tail length measurements for all *Sclerurus*. It has been proposed that

tail stiffness may aid in foraging in leaf litter (Slud 1964). While birds flip leaves with their downturned bills, the tail may serve as an anchor. Aside from the lack of stiffened tail webbing, tail structure is similar in scansorial species such as woodpeckers (Picidae) and woodcreepers (Furnariidae, Dendrocolaptinae), but *Sclerurus* spp. are not known to ascend trees or other vertical surfaces for foraging (Slud 1964, Skutch 1969).

The Short-billed Leaf-tosser (*Sclerurus rufifigularis*) is a widespread and locally common (southern Venezuela, Hilty 2003) to rare (eastern Ecuador, Ridgely & Greenfield 2001) bird of Amazonian terra firme. The species, as others in the genus, forages mainly on the forest floor and especially around logs (Skutch 1969).

On 17 December 2005 and while working as a tour guide at Sacha Lodge (0°28'12.82"S, 76°27'33"W), Sucumbíos Province, eastern

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Ecuador, one of us (PVE) walked one of the lodge trails just after dusk (approximately 18:30 h ECT) to a large, buttressed *Ceiba* sp. tree. The trunk of the tree was sufficiently large that an opening was carved into it to allow people to walk through. In the dusk, PVE observed a bird clinging motionless about 3 m from the ground on a buttress of the tree, positioned with its bill pointing upward and its tail held against the trunk in support. After observing the bird for a short while in the semi-dark, a flashlight was used to identify the bird as a Short-billed Leaf-tosser, a species that had frequently been seen foraging near the trail during daytime. PVE was able to see the bird well for some seconds, before the bird flew off into the nearby undergrowth. During nocturnal walks in January and February 2006, PVE found leaf-tossers clinging to the same tree on four more occasions, two of which involved two birds together. Unidentified bats (Chiroptera) were seen on the same area of the trunk. One observation occurred at dusk, whereas the other birds were seen more than 1 h after dusk. Upon approach, the birds usually flushed into the nearby undergrowth. Twice, patient waiting resulted in the birds returning to the tree, where they warily settled down on the side of the trunk opposite from the observer's location.

Nest and nest location have apparently not been described for the Short-billed Leaf-tosser and it seems highly unlikely that the species differs in nesting biology from its congeners, which have structurally similar nests in a tunnel that the birds dig in the earth surrounding river banks, trails, and roads (Denton & Blue-Smith 2000, Goeldi 1896, Herklots 1961, Skutch 1969). Thus, the tree was likely not a breeding site for the species. Additionally, the birds were never observed in the tree during the day, in spite of regular visits by lodge staff.

At dusk on 9 August 1997 in lowland Madidi National Park in Beni, Bolivia, BMW watched a single Black-tailed Leaf-tosser (*S. caudacutus*) flying into a hollow part of a rotting stump about 0.5 m above the ground where it clung like a woodcreeper with its bill up and tail down against the substrate, and roosted for the night. The opening in the stump was approximately 1 m high and 30 cm wide. We were not able to obtain photographic evidence of roosting birds.

Similar to the above observations on roosting behavior, on the mid-afternoon of 10 August 1992 at the Cuyabeno Reserve in lowland Sucumbíos Province, Ecuador, BMW observed a single Short-billed Leaf-tosser carrying a 2-cm wolf spider (Lycosidae) in its bill as it perched on the side of a stump just above the ground with its tail appressed to the trunk for support in the manner of a woodcreeper as it moved nervously back-and-forth, possibly in the vicinity of its nest or a fledgling.

BMW has also noted that both Short-billed Leaf-tosser and Tawny-throated Leaf-tosser (*S. mexicanus macconnelli*) occasionally perch vertically (in the manner of woodcreepers) near the bases of tree trunks after flying in aggressively in response to playback of conspecific recordings; the birds were not observed to move up or down from the perched position.

Observations of arboreal roosting for more than one *Sclerurus* species in at least two geographically separated regions suggest that vertical roosting behavior may be common in the genus. Frequent roosting or resting on vertical surfaces, such as tree stems, may be a plausible explanation for the development or presence of tail stiffness in *Sclerurus*. Skutch (1969) observed that *Sclerurus* spp. were not known to cling to stems, except when alarmed. However, roosting behavior of many Neotropical birds, including *Sclerurus* spp., is poorly known, and arboreal roosting in these species may have been overlooked previously.

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