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ECOLOGY AND BEHAVIOR OF THE JAMAICAN LIZARD CUCKOO

by

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On Jamaica many of the endemic land birds are poorly known from an ecological and behavioral standpoint. Therefore, the following information on the food, foraging behavior, and habitats of the Jamaican Lizard Cuckoo (Saurothera vetula), obtained while engaged in other studies, should be helpful in the future analyses of this species. To my knowledge the only references to its food habits are that of Gosse (1847) who found invertebrates (caterpillars, locusts, and spiders) and vertebrates (Anolis lizards and a mouse) in the stomach of this species and of Danforth (1928) who found a large green lizard (Anolis garmani) and beetles in the stomach of a bird he collected.

The Jamaican Lizard Cuckoo is widely distributed, occurring from lowland limestone scrub forest to montane forest. Throughout its distribution it prefers dense woodlands and thickets, although on occasion it is found in more open country.

Investigation on the Jamaican Lizard Cuckoo were conducted in the wet limestone forests of Jamaica during the spring and summer of 1969, 1970, and 1971 (cf. CRUZ 1972). This community is developed in areas of limestone rock where the rainfall is over 190 cm and may be as high as 381 cm (Asprey & Robbins 1953). For the most part this forest is located at elevations from 305-1200 m and is situated inland. Characteristic trees are broadleaf (Terminalia latifolia), Jamaican Cedar (Cedrela odorata), sweetwoods (Nectandra

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TABLE 18

FORAGING BEHAVIOR OF THE JAMAICAN LIZARD CUCKOO

Numbers of times foraging pattern was recorded in each foraging zone.

Numbers in parentheses indicates total number of observations.

| Foraging Zones | Gleanii invertebrates | U | Probin invertebrates | • | Percent of Foraging Zones |
|---------------------|--------------------------|--------|-------------------------|------|---------------------------------|
| Ground and | | | | | : |
| fallen logs | 2 | - | 3 | 2 | 9(7) |
| Distal half of | | | | | |
| tall shrubs and | | | | | |
| trees | 7 | 10 | - | - | 24(18) |
| Proximal half of | | | | | , |
| tall shrubs and | | | | | |
| trees | 20 | 31 | - | | 67(51) |
| Percent of Foraging | [| | | • | |
| Behavior | 38(29) | 55(42) | 4(3) | 3(2) | 100(76) |

spp.), bulletwoods (*Daphnopsis* spp.), prickly yellow (*Fagara martinicensis*), and figs (*Ficus* spp.).

I found the Jamaican Lizard Cuckoo to be an uncommon resident in the wet limestone forest. Invariably, I have seen it singly, usually after alerted to its presence by its call. In spite of its large size (40 m), this bird is inconspicuous as its long rectrices, instead of making it conspicuous, aids its protective coloration by giving it an unbirdlike contour. Primarily arboreal, its foraging activities were confined mainly to the inner branches of high shrubbery and trees (Table 18). Occasionally it was observed on the ground, where its actions reminded one of a terrestrial number of this family, *Crotophaga ani*. The foraging pattern of the Jamaican Lizard Cuckoo included gleaning from the ground, limbs, branches, twigs, and probing into rotting logs. Gleaning was the most frequent tactic employed and probing was the less frequently used (Table 18).

When hunting animal prey they usually move slowly through the foliage or sit on a branch, moving the head from side to side, until they detect a prey. At which time they move rapidly forward and seize it. Before swallowing the prey, which may be a lizard, large

insect, or rarely a frog, the cuckoo usually pecks at its head or applies pressure with the bill.;

Occassionally I have observed it on the ground or on a fallen log, searching carefully for prey.

Of the 76 feedings recorded, 44 (58%) were on vertebrates and 32 (42%) were on invertebrates (Table 18). The food items taken included spiders (Araneae), insects (Orthopterans, Homopterans, Lepidopteran caterpillars, and other unidentifiable insects), tree frogs (*Eleutherodactylus*), and lizards (*Anolis* spp.); and it was not uncommon to see one with the limp body of a lizard dangling from its bill.

While these observations show the foraging pattern of the Jamaican Lizard Cuckoo to be flexible and diverse, much work still needs to be done to complete our knowledge of its niche utilization pattern.

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