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### Notes on the Natural History of *Anolis desechensis*

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The Desecheo Anole (*Anolis desechensis*) is endemic on Desecheo Island, Puerto Rico (Heatwole 1976). It is a member of the *A. cristatellus* complex. The presence of this anole on Desecheo Island was first reported by Wetmore (1918).

Desecheo Island is a small (122 ha) mountainous island off the western coast of Puerto Rico in the Mona Passage (Morrison and Menzel 1972). The island is composed primarily of deformed or fragmental volcanic rocks of early Tertiary origin and the island vegetation includes a seasonal deciduous woodland and a thorny cactus-scrub (Woodbury et al. 1972).

The known herpetofauna of Desecheo consists of the snake *Alsophis portoricensis* (Grant 1932), and the lizards *Ameiva desechensis* (Heatwole and Torres 1967), *Sphaerodactylus levinsi* (Heatwole 1968), *Mabuya mabouya* (Meier and Noble in prep.), and *A. desechensis*. The only description of the natural history of *A. desechensis* was presented by Heatwole (1976): "At present *A. monensis* on Mona has a structural niche and general ecology almost identical to that of *A. cristatellus* on Puerto Rico (Gorman and Stamm 1975). My casual observations suggest the same is true of *A. desechensis*." Gorman and Stamm (1975) described *A. monensis* as "a typical 'trunk-ground' lizard." They also provided data on its perching behavior and mentioned that individuals were observed eating berries.

Specimens of *A. desechensis* were observed during each of our three visits to Desecheo Island in March, July, and October 1987. Observations of *A. desechensis* were incidental to our purpose on the island and were not systematic; however, due to the dearth of information on the natural history of *Anolis desechensis*, we feel that our casual observations are worth reporting.

The anoles appeared to be most common on shore near the vegetation line. Almost every pile of rocks had an adult male and several females associated with it. The males were most frequently perched in a conspicuous location, whereas females were more likely secretive in crevices between the rocks. The abundance of anoles near the shore may be attributable to the influx of food organisms living on the flotsam.

Desecheo anoles were less readily observed, but still common, in the seasonal deciduous woodlands. In this habitat, males were most frequently observed displaying head downward on the lower trunks of gumbo limbo trees (*Bursera simaruba*). Females and immature males were rarely observed in such exposed situations. However, females were thus exposed during actual mating. These observations correspond with those of Kiestler et al. (1975) who found that large male *A. cristatellus* had a tendency to flee to large trees, whereas females and juveniles exhibited a greater tendency to flee into grass and other low-lying dense vegetation.

Desecheo anoles appeared relatively uncommon in the thorny cactus-scrub communities found on upper slopes and ridge tops. Desecheo anoles became active at dawn and seemed to display a shift in habitat utilization coincident with increasing activity of *Ameiva desechensis*. The anoles showed a tendency to avoid perches on or near the ground during periods of high *Ameiva* activity during the heat of the day. Anoles frequented low perches in the early morning and late afternoon, and they tended to cling to slender branches at night.

On the beach, Desecheo anoles were frequently observed sallying after flies. On two occasions in October, one anole was observed catching a grasshopper and another a moth. On 19 July 1987, an adult male anole was observed head downward on the trunk of a *Bursera simaruba* while eating an anole egg. Cannibalistic oophagy occurs at a constant, low level among many species of reptiles (Polis and Myer 1985). Adult *Anolis lineatopus* have been documented cannibalizing juveniles of the species (Rand and Andrews 1975). Cannibalism in reptiles is most frequently attributed to opportunistic prey capture as part of normal feeding behavior (Polis and Myers 1985). However, the leaf litter and soil foraging best suited for finding lizard eggs is not typically part of the foraging repertoire of *Anolis*. Anoles are sit-and-wait foragers (Stampes et al. 1981).

The natural history of *A. desecheensis* is quite similar to that of other members of the *A. cristatellus* complex. It displays similar foraging and perching strategies and even is preyed upon by the same species of snake. On 15 March 1987, an *Alsophis portoricensis*, upon capture, regurgitated an *Anolis desecheensis*.

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