Catalogue of American Amphibians and Reptiles.

DODD, C. KENNETH, JR., AND HOWARD W. CAMPBELL. 1982. Anolis roosevelti.

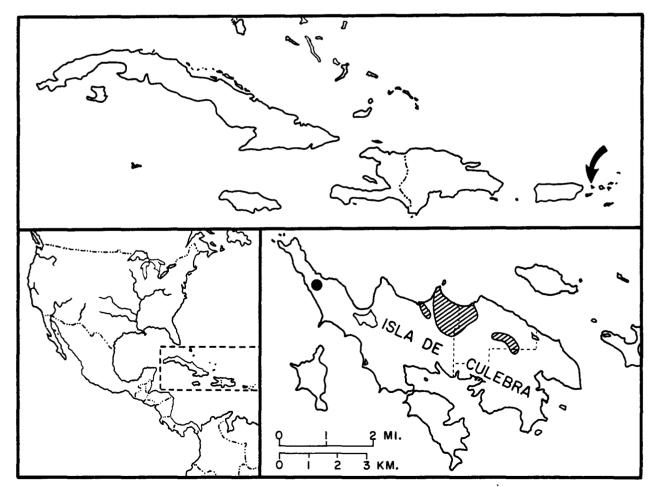
Anolis roosevelti Grant Culebra Island giant anole

Anolis roosevelti Grant, 1931b:219. Type-locality, "Culebra Island, Porto Rico." Holotype, Mus. Comp. Zool. 36136, collected by Chapman Grant on April 22, 1931. Examined by authors.

- CONTENT. No subspecies are recognized.
- DEFINITION AND DIAGNOSIS. A large Anolis in the ricordii species group of the cuvieri series (Williams, 1976) reaching a length of approximately 160 mm snout-vent. The color in life is brownish-grey with two lines on each side. One line begins around the ear and extends posteriorly to the groin; the other begins in the shoulder region and extends into the groin. There is a distinct light spot on the temple, and the eyelids are yellow. The throat fan is grey except for the lower rear quarter which is light yellow. The tail is yellowish-brown and the underside of the belly is whitish. The tail in adult males has a scalloped fin along most of its length. This fin is high: the third from the distal most ray is twice as long as the depth of the tail, and the fourth proximal ray is as long as the depth of the tail. The edge of the tail fin is deeply scalloped in A. roosevelti, as opposed to less deeply in A. cuvieri. Anolis roosevelti is additionally distinguished from Anolis cuvieri by being grey, not green or brown; by a decidedly sloping loreal area (vertical in A. cuvieri); by lacking postanal scales in males

(present in A. cuvieri); by smooth scales under the base of the tail (keeled in A. cuvieri); and by its larger size.

- DESCRIPTIONS. Grant (1931b, 1932a) and Williams (1962) give general morphological descriptions and provide tables of comparison with A. cuvieri and Hispaniolan giant anoles. Grant (1931b, 1932a) and Rivero (1978) give general notes on coloration. Etheridge (1959) provides information on skeletal morphology.
- ILLUSTRATIONS. The only illustrations of this species are lateral and dorsal black and white photographs of the head of the type-specimen contained in the original description (Grant, 1931b).
- DISTRIBUTION. The species is historically known only from Culebra Island, Puerto Rico (see COMMENT).
- Fossil Record. None (Pregill, 1981).
- PERTINENT LITERATURE. Grant (1931b) provided notes on the species' morphology and coloration. Additional morphological and color descriptions, and comparisons with other giant anoles, are contained in Grant (1932a), Williams (1962) and Rivero (1978). Etheridge (1959) gave information on skeletal morphology which he believed allied it in uncertain position within an α group of Anolis. Williams (1976) placed Anolis roosevelti in the ricordii species group of the cuvieri series. Pregill (1981) noted zoogeographic relationships with Anolis cuvieri. The species is included in several checklists without additional comment (Grant, 1931a, 1932b; Barbour, 1935, 1937; Schwartz and Thomas, 1975; Williams, 1976) or with statements concerning extreme rarity or possible extinction (Anon., 1973; Philibosian and Yntema, 1977; Groombridge, 1981). Honegger (1979) summarized its conservation status. Carr (ms, p. 20) mentions that the lizard is still said to be seen by local people on Culebra and records a conversation



MAP. Solid dot marks probable type-locality on the Flamenco Peninsula; remaining potential habitat suitable for A. roosevelti is shaded.

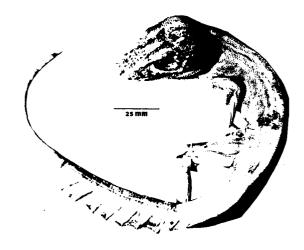


FIGURE. Anolis roosevelti, adult male holotype, MCZ 36136.

with a farmer on Monte Resaca in which the appearance, size, and habitat of the lizard were described convincingly (see COMMENT).

• ETYMOLOGY. The species is named in honor of Theodore Roosevelt, Jr., then Governor of Puerto Rico.

COMMENT

Aside from occasional references to the presence of this species in the fauna of Puerto Rico, the Culebra Island giant anole has been almost ignored since its discovery. Its natural history and ecology are unknown. Since the species is known from only two preserved specimens (the second specimen is in the University of Michigan Museum of Zoology, UMMZ 73644), and has not been collected since 1932, some authors have asserted that it is extinct. There is reason, however, to believe the species survives in the remaining forest on Culebra. Recent workers have located Mr. Dumas, who collected the lizards for Major Grant in 1931. He not only remembers the habits of A. roosevelti but claims to still occasionally see the species (as recently as 1978). Mr. Dumas relates that the holotype was collected on the Flamenco Peninsula before it was deforested. That area once supported a forest of tall gumbo limbo (Bursera) and Ficus trees, much like the small patches that remain on steep northern slopes of the island. Mr. Dumas describes the lizard as living high in the trees, where it is occasionally seen on the branches. He claims that he sees it most commonly when the fruits of the trees, especially the *Ficus*, are ripe. Mr. Dumas remembers the lizard as being grey or brown, which is consistent with the original description. Other verbal reports of giant anoles from Culebra referred to them as being green, suggesting that the observers were seeing the introduced iguana. Several parties of herpetologists have made specific searches for the species in the last few years without success. The remaining small patches of virgin forest habitat, however, should be large enough to maintain a few lizards. The arboreality of A. roosevelti should provide some protection from house cats and other introduced predators, and there are no mongooses or large avian predators on the island. Surveys should be conducted prior to listing the species as extinct and potential remaining habitat should be protected. Anolis roosevelti is listed as Endangered by the U.S. Department of the Interior, and "Critical Habitat" has been determined on Culebra Island to include most of the remaining forest habitat.

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