

Catalogue of American Amphibians and Reptiles.

Malhotra, A. and R.S. Thorpe. 1995. *Ameiva fuscata*.

Ameiva fuscata Garman

Ameiva fuscata Garman, 1887:5. Type-locality, "Dominica." Syntypes, Museum of Comparative Zoology, Harvard University (MCZ) 6087 (3 specimens; see Comment), collected by the Blake Expedition in 1879 (not examined by authors). *Amiva plei* var. *brachiosquamatus*: Cope in Verrill, 1892:352.

• **Content.** No subspecies are recognized.

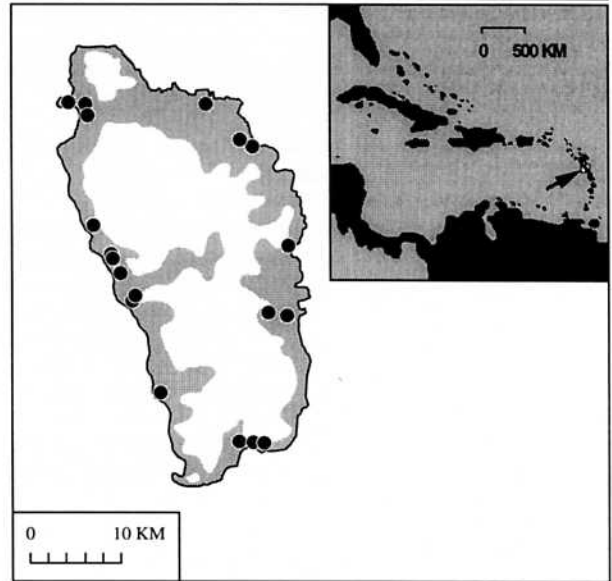
• **Definition.** *Ameiva fuscata* is a large, sexually dimorphic species, with males attaining a maximum SVL of 250 mm (Bullock and Jury, 1990) and females about 150 mm. Adult males possess larger heads, particularly in the region of the jaws, and well-developed femoral pores compared to those of females of similar size. The nostril opens between two nasal scales. Supralabials and infralabials number 6-7. Three supraorbital plates are present. The dorsal scales are granular and occur in 185-231 rows around the body. Ventral plates are arranged in 30-34 transverse rows and 13-15 (usually 14) longitudinal rows, the outermost of which are small. Scales on the chin and throat are granular. A transverse gular band of enlarged scales and a patch of enlarged scales on the mesopterygium are present. Femoral pores number 25-34 on each side and 38-46 lamellae are on the fourth toe of the hind foot. The tail is covered with straight, keeled scales.

A striking ontogenetic shift in color pattern is described herein from a series of 21 lizards (51-194 mm SVL) captured live from the Cabrits (near Portsmouth, Dominica). Hatchlings and juveniles to about 100 mm SVL possess a uniform coppery brown dorsum, which also is the ground color on the flanks. A chocolate-brown to black lateral band is edged on both sides by a bright yellow stripe, which contains a row of several yellowish spots. The tympanum and eye also are edged with yellow. The venter is pale grey and washed with pink; the latter is especially pronounced in hatchlings. The chin shields are a pale blue, and the tail is heavily barred with black.

The juvenile pattern is retained in lizards to 130 mm SVL, except that the ventral pink sheen disappears and bright blue spots appear on the outermost ventral scales.



Figure 1. An adult male *Ameiva fuscata* from Dominica. Photograph by Anita Malhotra



Map. The range of *Ameiva fuscata* on Dominica. These lizards historically were found in all coastal districts to an altitude of 300 m (indicated by shading). The species apparently is spreading inland and to higher elevations (see Distribution). The type-locality is too imprecise to plot.

The dorsum remains coppery brown in lizards to 160-180 mm SVL, which includes all the larger adult females and the smaller adult males. The dorsum may take on a greenish tinge anteriorly, and the yellow stripes edging the dark lateral band become very indistinct and diffuse and may become bluish anteriorly. A second row of spots may appear within the lateral band, and the existing spots turn blue. An additional dark band may border the ventral scales. The venter becomes a muddy pale blue, often washed with darker hues on the throat and upper chest. The ventral surface of the limbs and tail are usually pale yellow.

The dorsum and most of the flank of adult males larger than 160 mm SVL is steely blue and the dark lateral band may become very indistinct and patchy, often disappearing anteriorly. The dark band bordering the ventral scales is often very distinct. The lateral yellow stripes disappear, occasionally replaced in some specimens by a short blue stripe which never extends posterior to the shoulder. The blue lateral spots may be numerous and occur in 2-4 irregular rows, are distinct and very bright in hue, and may also occur on the ventral scales, thigh, and tail. The dorsal surfaces of the shoulder, thigh, and tail may be liberally sprinkled with small blue spots. The venter is often brighter blue than in smaller individuals, with a darker bluish wash on the throat and upper chest, and may occasionally be a pale yellowish-pink.

• **Diagnosis.** *Ameiva fuscata* may be distinguished from its closest congeners by the following combination of characters: frontonasal longer than wide; three supraoculars, the last separated from the occipitals by 2-5 scale rows; usually 14 longitudinal rows of ventral scales; cau-

dal scales keeled and in straight rather than oblique rows.

• **Descriptions.** The most complete descriptions are in Garman (1887) and Barbour and Noble (1915). Other descriptions are included in Günther (1888). Scale counts and a brief description of color pattern in preserved specimens are given by Baskin and Williams (1966). Böhme (1988) described the hemipenes.

• **Illustrations.** The species is illustrated here for the first time. Böhme (1988) provided a line drawing of the hemipenes.

• **Distribution.** *Ameiva fuscata* is endemic to Dominica, Lesser Antilles. Largely restricted to lower elevations, it may be abundant in natural woodland on the Caribbean and Atlantic coasts as well as in coconut, banana, and aloe plantations. These lizards commonly occur to elevations of 300 m, and whereas only a few reliable records exist above this altitude (P.G.H. Evans, pers. comm.; J. Reardon, pers. comm.), the species may be spreading into the interior of the island as the conversion of rainforest to agricultural plantations provides suitable conditions — an open canopy and access to plenty of fallen fruit on which to feed.

• **Fossil Record.** None.

• **Pertinent Literature.** Bullock and Evans (1990) described densities and biomass of *Ameiva fuscata* in different coastal habitats on Dominica, and Bullock and Jury (1990) provided data on diet and foraging behavior in one of these (dry scrub woodland). Additional notes are provided by Verrill (1892). Brooks' (1968) data on body temperatures showed that *A. fuscata* is heliothermic, as are other congeners. Somma and Brooks (1976) described reproductive data, including clutch size, size at maturity, and seasonality. Baskin and Williams (1966) included this species in an evaluation of the relationships and zoogeography of Lesser Antillean *Ameiva*. MacLean (1974) and Presch (1974a, b) included *A. fuscata* in broader osteological studies of phylogenetic relationships among teiid lizards. Schwartz and Henderson (1991) provided a synopsis of the distribution and natural history of the species. *Ameiva fuscata* was listed in the following checklists and keys: Barbour (1914, 1930, 1935, 1937), Schwartz and Thomas (1975), MacLean et al. (1977), Schwartz and Henderson (1985, 1988), and Powell et al. (1996).

• **Remarks.** Barbour (1937) attributed the species' abundance on Dominica to the absence of the mongoose which, despite at least two attempts to introduce it, has apparently so far failed to successfully colonize the island (Hoagland et al., 1989).

• **Etymology.** The name *fuscata*, from the Latin "fuscus" (meaning "brown" or "swarthy"), refers to the color of the dorsum.

• **Comment.** Of the three original syntypes of *Ameiva fuscata*, one apparently has been lost. Another was exchanged to the Museu de Zoologia, Universidad de São Paulo, Brasil (MZUSP 14427); this is a small adult male (Ana Maria Ramos Costa, *in litt.*, 6.XI.1995). The remaining specimen, now MCZ-R-60583, appears to be a juvenile male (José Rosado, *in litt.*, 4.X.1995).

We believe that geographic variation, so far undocumented, exists in this species. Preliminary data from an unpublished study has shown that lizards from the east and west coasts have significantly different numbers of body scales and fourth-toe lamellae, and also show body proportion and color pattern differences. For example, the dorsal colors in adults from the east coast seem to be much more saturated, and these lizards seem to acquire the "large male" coloration at a larger size or not at all. The pattern of variation, as far as can be ascertained, ap-



Figure 2. A juvenile *Ameiva fuscata* from Dominica. Photograph by Anita Malhotra.

pears to parallel that of the sympatric *Anolis oculatus* (Malhotra and Thorpe, 1992).

• **Acknowledgments.** We thank José P. O. Rosado, Museum of Comparative Zoology at Harvard University, and Ana Maria Ramos Costa, Curator, Museu de Zoologia da Universidade de São Paulo, for providing information on the status of the syntypes.

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Primary editor for this account, Andrew H. Price.

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