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HENDERSON, ROBERT W. AND ALBERT SCHWARTZ. 1984. Uromacer frenatus.

Uromacer frenatus (Günther)

Ahaetulla frenata Günther, 1865:94. Type-locality, unknown. Holotype, Brit. Mus. Natur. Hist. 1946.1.6.70, male, collector and date unknown (Boulenger, 1894) (not examined by authors).

Uromacer inornatus Garman, 1887:284. Type-locality, "Jeremie,"
[Dept. de l'Ouest], "Haiti." Syntypes, MCZ 3345, 2 females, collected by P. R. Uhler in 1865; MCZ 3610, 2 females, collected by A. F. Weinland in 1859 (not examined by authors).

Uromacer frenatus: Boulenger, 1894:116.

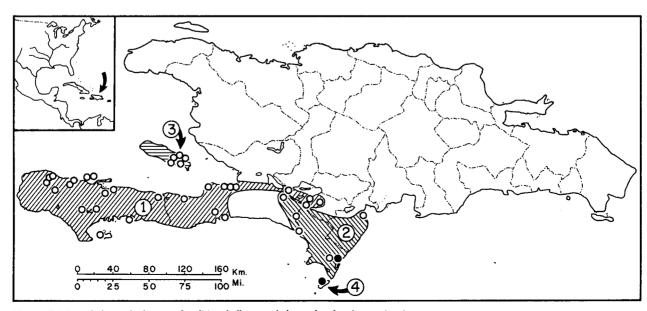
- CONTENT. Four subspecies are recognized, U. f. frenatus, U. f. chlorauges, U. f. dorsalis, and U. f. wetmorei.
- DEFINITION. A species of the colubrid snake genus Uromacer with an elongate body and snout, the head scales accordingly modified. Ventrals are 176-205 in males, and 172-200 in females; subcaudals are 168-224 in males, and 161-215 in females; total ventral scales (ventrals + subcaudals) are 351-420 in males, and 340-413 in females. The dorsum is polychromatic (green, gray, tan, brownish to brown) with or without a well-defined middorsal zone. The head and extreme anterior portion of the body (both dorsally and ventrally) are green to yellow green in monochromatic and polychromatic populations with no pale lateral line on body (although at times present on the anterior quarter or less of body). There are 17 scales at midbody, reducing to 11 in males and 13 in females. There are 1 or 2 loreals, depending upon subspecies.
- DESCRIPTIONS. Boulenger (1894:116) gave a complete description of the scutellation and coloration based on three preserved male specimens. Cochran (1941:335-338) gave data on a long series of preserved specimens and also presented (p. 339-341) information on "Uromacer dorsalis." Cochran (1931) described "U. wetmorei" and later (1941:338-339) repeated the description verbatim. Horn (1969) discussed polychromatism in the species, noted the scutellar variation, presented the same information for "U. dorsalis," and relegated wetmorei to subspecies status. Schwartz (1976) discussed chromatic variation in U. frenatus and presented meristic data based on samples from throughout the range of the species. He also described a new subspecies (U. f. chlorauges), whose status changed to that of a subspecies of "U. wetmorei" (Schwartz, 1979). Later, Schwartz (1979) redefined frenatus, regarded U. dorsalis as a subspecies of U. frenatus, and raised "wetmorei" to species status (but it is here again regarded as a subspecies of *U. frenatus* [see COMMENTS]).

- ILLUSTRATIONS. Günther (1865) showed a drawing of a lateral view of the head in the original description. Cochran (1941) showed dorsal, lateral, and ventral views of the head of *U. frenatus*, *U. dorsalis* and *U. wetmorei*. Horn (1969) had photographs of lateral views of the heads of two subspecies (*frenatus* and *dorsalis*), which he regarded as species. Henderson and Binder (1980) presented a photograph of the lateral view of the head of a live "*U. wetmorei*" (=*U. f. chlorauges*).
- DISTRIBUTION. Uromacer frenatus occurs throughout the "south island" of Hispaniola (Williams, 1961) and also on Ile de la Gonâve, Ile Grande Cayemite, Ile-à-Vache, Grosse Caye, and Isla Beata.
 - Fossil Record. None.
- PERTINENT LITERATURE. The above papers comprise the basic systematic literature. Works dealing with other topics include those on evolution, phylogeny, and/or zoogeography (Horn, 1969; Maglio, 1970; Henderson and Binder, 1980; Schwartz, 1980); skull morphology (Maglio, 1970); diet and foraging (Horn, 1969; Henderson and Binder, 1980; Henderson and Horn, 1983); responses of neonates to chemical extracts of prey (Henderson et al., 1983); and habitat (Henderson and Horn, 1983).
- REMARKS. Uromacer frenatus occupies a variety of wooded habitats, both mesic and xeric, from sea level to an elevation of 915 m.
- ETYMOLOGY. The trivial name *frenatus* is derived from the Latin meaning "bridle," in apparent allusion to the dark canthal-postocular line; *chlorauges* is from the Greek, meaning "green bright light" in allusion to the green dorsal color of the subspecies; *dorsalis* is likewise Latin, referring to the upper surface, perhaps in allusion to the tan (in contrast to green in other *Uromacer*) dorsal coloration; the name *wetmorei* is a patronym for Alexander Wetmore, one of the collectors of the holotype, and noted ornithologist.

1. Uromacer frenatus frenatus (Günther)

Ahaetulla frenata Günther, 1865:94. Uromacer frenatus frenatus: Horn, 1969:9.

• DEFINITION. A subspecies of *U. frenatus* characterized by 180-196 ventrals in males, 172-195 in females (mainland populations only, not including Ile-à-Vache or Ile Grande Cayemite material); subcaudals are 183-224 in males, and 182-215 in females; total ventral scales (ventrals + subcaudals) are 364-420 in males, and 363-403 in females (mainland only). There is 1 loreal scale. Mainland populations are dichromatic, tan to gray or brownish dorsally and with a green or yellow-green head and anterior portion of body. Ile-à-Vache populations are strongly dichromatic dark green



MAP. Solid symbols mark the type localities, hollow symbols mark other known localities.

above and buff below, or tan above and buff below. Ventrals are 186–196 in males, and 177–185 in females; total ventral scales are 390–392 in 2 males, and 357–389 in females. Grande Cayemite populations are weakly dichromatic (dorsum tan to graybrown with middorsal zone greenish gray to gray-brown, brown or charcoal). Ventrals are 185–194 in males, 181–196 in females; total ventral scales 363–405 in males, 370–399 in females.

• REMARKS. Uromacer f. frenatus occurs on the Hispaniolan south island and Grosse Caye, as far east in the República Dominicana as Puerto Escondido and El Aguacate on the north slope of the Massif de la Selle-Sierra de Baoruco. To the south of the Massif de la Selle in Haiti, U. f. frenatus is known only from the Jacmel region, far to the west of northern records in the Valle de Neiba. Elevations vary from sea level (or below in the Valle de Neiba) to 915 m at El Aguacate, on the north slope of the Massif de la Selle in the República Dominicana.

Although the data for the Ile-à-Vache and Grande Cayemite populations are included above, there is little doubt that these populations should be recognized nomenclaturally, since their chromatic details are not matched on the Hispaniolan mainland.

2. Uromacer frenatus chlorauges Schwartz

Uromacer frenatus chlorauges Schwartz, 1976:323. Type-locality, "21.0 km SW Enriquillo, Pedernales Province, República Dominicana." Holotype, Carnegie Mus. 56831, adult female, taken by Richard Thomas on 10 December 1964 (examined by authors).

Uromacer wetmorei chlorauges: Schwartz, 1979:211.

- DEFINITION. A subspecies of *U. frenatus* characterized by 177-192 ventrals in males, and 172-182 in females; subcaudals are 168-200 in males, 161-198 in females; total ventral scales (ventrals + subcaudals) are 351-384 in males, and 340-379 in females. There is a middorsal longitudinal stripe gray in juveniles, gradually becoming some shade of green in adults; the sides and venter are buffy tan, the middorsal zone often outlined by dark dashes and often with a pale stripe in females (absent in males) on scale rows 3-7, depending on the width of the middorsal green stripe.
- REMARKS. Uromacer f. chlorauges occurs from Soliette in Haiti, on the northern slope of the Massif de la Selle, east to the city of Barahona, República Dominicana, and thence south onto the Península de Barahona, onto the southern slopes of the Massif de la Selle in the República Dominicana as high as the army post of Don Juan on the Dominico-Haitian border; unknown from the southeastern portion of Haiti but expected there.

3. Uromacer frenatus dorsalis Dunn

Uromacer dorsalis Dunn, 1920:43. Type-locality, "Gonaives Island, West Indies" (=Ile de la Gonâve, Haiti). Holotype, MCZ 12867, female, taken by Glover M. Allen in August 1919 (examined by authors).

Uromacer frenatus dorsalis: Schwartz, 1979:211.

- DEFINITION. A subspecies of *U. frenatus* characterized by 195-205 ventrals in males and 189-210 in females; subcaudal scales are 205-209 in males and 186-215 in females; total ventral scales (ventrals + subcaudals) is 403-412 in males and 376-413 in females. There are 2 loreal scales. The subspecies is polychromatic, the dorsum green to dark brown, sides and venter tan and heavily stippled with dark brown, or dorsum, sides and venter uniform tan stippled with dark brown. The head and extreme anterior portion of body are always green to yellow-green.
 - REMARKS. Known only from Ile de la Gonâve, Haiti.

4. Uromacer frenatus wetmorei Cochran

Uromacer wetmorei Cochran, 1931:91. Type-locality, "Beata Island, Dominican Republic." Holotype, U.S. Nat. Mus. 83891, male, collected by Alexander Wetmore and F. C. Lincoln on 13 May 1931 (examined by authors).

Uromacer frenatus wetmorei: Horn, 1969:21. Uromacer wetmorei wetmorei: Schwartz, 1979:211.

• DEFINITION. A subspecies of *U. frenatus* characterized by 176-178 in ventrals in males and 174 and 175 in 2 females; total

ventral scales (ventrals + subcaudals) is unknown (no complete tail in any specimen). Coloration is a rich dark brown middorsal stripe with sides and venter some shade of tan or brown. The subspecies is known from only 5 specimens.

• REMARKS. Known only from Isla Beata, República Dominicana.

COMMENT

Uromacer "wetmorei" has had an unstable nomenclatural history (Cochran, 1931; Horn, 1969; Schwartz, 1976, 1979), being regarded as either a full species, or as a subspecies of U. frenatus. The junior author (Schwartz, 1979) elevated wetmorei to species status and, on the basis of material then at hand, it was a logical move. Recent collections by the senior author on Ile de la Gonâve, Haiti have, however, forced us to re-evaluate the status of wetmorei, and again to relegate it to a subspecies of U. frenatus. Accumulation of a long series of fresh U. frenatus has produced all color and pattern variations of *U. frenatus* and *U. "wetmorei,*" described in Schwartz (1979), from a single localized population (Picmi) on Gonâve. In addition, ventral and subcaudal counts of U."wetmorei" and U. frenatus appear clinal, going in a northwesterly direction from Isla Beata (República Dominicana) to Ile de la Gonâve (Haiti). Because there is geographical variation in the degree of incidence of the color patterns, we still feel justified in observing several subspecies of *U. frenatus*.

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