

REPTILIA: SQUAMATA: CORYTOPHANIDAE

LAEMANCTUS LONGIPES

Catalogue of American Amphibians and Reptiles.

McCranie, J.R. and G. Köhler. 2004. *Laemanctus longipes*.

***Laemanctus longipes* Wiegmann**
Smooth Casqueheaded Basilisk, Cutete Policia

L. [aemanctus]. longipes Wiegmann 1834:46. Type locality, "prope Jalapam" [Jalapa, Veracruz, México]. Holotype, Zoologische Museum, Museum für Naturkunde der Humboldt-Universität zu Berlin (ZMB) 494, an adult male, collected by F. Deppe and C.J.W. Schiede, between July and mid-November 1828 (examined by GK).

• **CONTENT.** Three subspecies are currently recognized: *L. l. longipes*, *L. l. deborrei*, and *L. l. waltersi*.

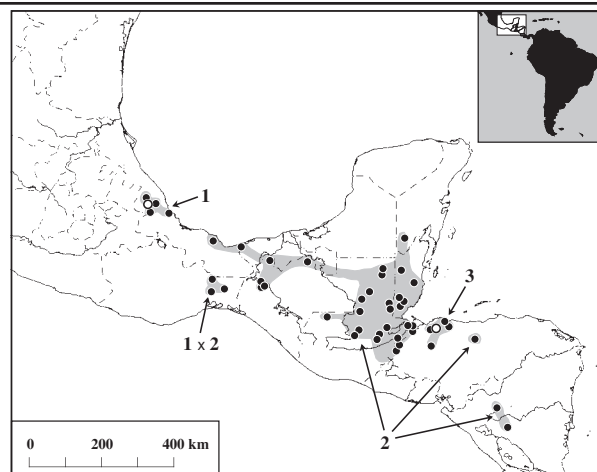
• **DEFINITION.** *Laemanctus longipes* is a moderately large corytophanine (maximum recorded snout-vent length 150 mm; McCoy 1968, although see Boulenger 1885, who recorded a SVL of 190 mm for this species) with an extremely long tail (3–4 times longer than SVL), a laterally compressed body, and a unique flat-topped cephalic casque. The dorsal head scales are strongly rugose to slightly carinate and the anterior dorsal head scales are similar in size to nearly twice as large as the posterior ones. The posterior edge of the casque lacks a fringe of enlarged, flattened, triangular scales. Scales around the posterior edge of the casque (last superciliary to last superciliary) number 21–32. The nasal scale is single, the nostril is located more or less centrally in the scale, and the opening is directed posterolaterally. The gular fold varies from absent to complete, with 2–5 rows of small scales contained in the fold. The gular scales are keeled; each scale has one, two, or three keels. The dorsal body scales are large and keeled, with the middorsal scale row not enlarged and not forming a serrated dorsal crest. The ventral scales are large, strongly keeled, imbricate, and usually pointed posteriorly. Scales around the midbody number 31–59 (McCoy 1968, lower value our data). The subdigital scales have keratinized knobs on the anterior section of each scale. Caudal autotomy is absent. Femoral and preanal pores are absent.

The dorsal surfaces are green in life with about 4–7 dark green, brown, or pale green crossbars. The crossbars usually have dark brown anterior and posterior edging as they cross the middorsum. A narrow, interrupted white ventrolateral stripe extends from the level of the axillae to the groin.

• **DIAGNOSIS.** *Laemanctus longipes* can be distinguished from *L. serratus* by lacking a projecting fringe of enlarged, erect, flattened, triangular scales on the posterior edge of the head casque and by lacking a serrated middorsal crest. The species differs from other members of the family Corytophanidae in having a flat-topped head casque.

• **DESCRIPTIONS.** Detailed descriptions are in Wiegmann (1834), Boulenger (1877), Smith (1944), McCoy (1968), Lang (1989a), Lee (1996, 2000), Campbell (1998), and Köhler (1999b).

• **ILLUSTRATIONS.** **Color photographs** are in Stolk (1979), Wynne (1981), Alvarez del Toro (1982), Obst et al. (1988), Villa et al. (1988), Stafford (1994), Lee (1996, 2000), Campbell (1998), Hartdegen (1998), Köhler (1999b, 2000, 2001, 2003), Stafford and Meyer (1999), Beyer (2001), and Stafford and Mallory (2002). **Black and white photographs** are in Neill (1961), Alvarez del Toro (1973), and Kort (1988). Wiegmann



MAP. Distribution of *Laemanctus longipes*: circles denote type localities (the type locality of *L. l. deborrei* is too imprecise to plot) and dots represent other known localities (some dots denote two or more proximate localities). The populations from Oaxaca, México were considered by McCoy (1968) to be intergrades between *L. l. longipes* and *L. l. deborrei*.



FIGURE. Young adult female *Laemanctus longipes* (USNM 549415) from between Laguna del Cerro and Quebrada Grande, Copán, Honduras (photograph by JRM).

(1834) provided a **color drawing** of the adult holotype (reproduced in black and white in the reprint edition) and Weber (1945) a **color painting** of a Mexican specimen. **Black and white drawings** are in Boulenger (1877, adult and dorsal surface of head casque), Reynolds (1913, shoulder girdle and sternum), McCoy (1968, dorsal surface of head casque), Wever (1978, cochlear region), Lang (1989a; hyoid, lateral view of skull, and posterior marginal teeth), Lee (1996, 2000, lateral surface of head), and Köhler (1999b, dorsal surface of head and casque).

• **DISTRIBUTION.** *Laemanctus longipes* occurs at low and moderate elevations (near sea level to 1200 m) on the Atlantic versant from central Veracruz, México to central Nicaragua, avoiding the subhumid northern portion of the Yucatán Peninsula (see **Remarks**). The species also occurs on the Pacific versant of the Isthmus of Tehuantepec in east-central Oaxaca, México, and J.A. Campbell (in litt. 25 June 2001) has photographs "of an individual from Cerro Montecristi on the Guatemalan-El Salvador border that was found on a Pacific-flowing creek" in Guatemala.

• **FOSSIL RECORD.** None.

• **PERTINENT LITERATURE.** References are listed by topic: **literature reviews** (Smith and Smith 1976, 1993), **annotated**

synonymy (McCoy 1968), **hemipenis** (Böhme 1988, see **Remarks**), **subdigital scales** (Peterson 1983), **parietal eye** (Gundy and Wurst 1976), **microanatomy of scales** (Lang 1989b), **osteology** (Camp 1923, de Queiroz 1987, Lang 1989a), **dentition** (Olson et al. 1986, 1987), **reproduction** (Duellman 1963, McCoy 1968, Fitch 1970, McCarthy 1982, Blody 1983, Stafford 1994, Campbell 1998, Köhler 1999b, Beyer 2001, Stafford and Mallory 2002), **arterial system** (Zug 1971), **ear and hearing** (Wever 1978), **trunk nerves** (Renous-Lécuru and Jullien 1972a, b), **ulnar nerve course** (Jullien and Renous-Lécuru 1972), **phylogenetic relationships** (Schulte et al. 2003), **color change in captivity** (Vaillant 1896), **care in captivity** (Kort 1988, Hartdegen 1998, Beyer 2001), **longevity in captivity** (Snider and Bowler 1992), **predation** (Draheim 1995), and **conservation** (Wilson and McCranie 2004).

McCoy (1968) and Lang (1989a) provided **taxonomic reviews** and the latter a **phylogenetic analysis**. Comments on **biogeography** are in Stuart (1950), Savage (1966), Johnson (1989), Flores-Villela (1991), and Wilson and McCranie (1998).

The species is mentioned in **distribution notes, faunal lists, or keys**: Cope (1865, 1887), Boulenger (1885), Günther (1885), Ferrari-Perez (1886), Boettger (1893), Werner (1903), Atkinson (1907), Schmidt (1941), Smith (1944), Stuart (1948, 1958, 1963), Smith and Taylor (1950), Duellman (1963, 1965), McCoy (*in Peters and Donoso-Barros 1970*), Villa (1971), Meyer and Wilson (1973, *in part*; USNM 84026, 84550 are *L. serratus*), Henderson and Hoevers (1975), Johnson et al. (1977), Lee (1980, 1996, 2000), Alvarez del Toro (1982), Wilson (1983), Flores-Villela et al. (1987, 1995), Pérez-Higareda et al. (1987), Villa et al. (1988), Campbell and Vannini (1989), Mendelson (1990), Pelcastre Villafuerte and Flores-Villela (1992), Flores-Villela (1993), Stafford (1994), Wilson and McCranie (1994, 2002), da Silva and Sites (1995), Casas-Andreu et al. (1996), Muñoz et al. (1996), Ruiz-Pérez (1996), Vogt et al. (1997), Campbell (1998, 2001), Köhler (1999a,b, 2000, 2001, 2003), Stafford and Meyer (1999), Espinal et al. (2001), and Wilson et al. (2001).

• **REMARKS.** Duellman (1958) and McCoy (1968) rejected the Colima, México record of *Laemanctus longipes* first reported by Gadow (1905). Böhme (1988) described the hemipenis of the species (as *L. deborrei*) based on specimens from “Costa Rica,” however *L. longipes* is unknown from that country.

The “*Laemanctus longipes*” of A.M.C Duméril and Duméril (1851), A.H.A. Duméril (1856), and Bocourt (*in A.H.A. Duméril et al. 1870–1909*) actually apply to *L. serratus*.

• **ETYMOLOGY.** The name *longipes* is from the Latin *longus* (long) and *pes* (foot), in reference to the long feet; *deborrei* is a patronym honoring Preudhomme de Borre, former curator of the IRSNB; and *waltersi* is a patronym honoring Leon L. Walters, who assisted K. Schmidt in the collection of the holotype.

• **COMMENT.** We prefer the name Smooth Casqueheaded Basilisk (Campbell 1998) over Eastern Casquehead Iguana (Liner 1994, Frank and Ramus 1995), although neither would be meaningful to people living in the geographical range of the species.

1. *Laemanctus longipes longipes* Wiegmann

L. [aemanctus]. longipes Wiegmann 1834:46. See species synonymy.

Laemanctus longipes longipes: McCoy 1968:667. First use of trinomial.

• **DEFINITION.** The gular fold is complete, mean number of scales around midbody is 55 (50–59), and the maximum known SVL is 150 mm (McCoy 1968, but see Boulenger 1885).

2. *Laemanctus longipes deborrei* Boulenger

Laemanctus de Borrei Boulenger 1877:465. Type locality, “de Tabasco (Mexique).” Syntypes (2), Institut Royal des Sciences Naturelles de Belgique (IRSNB) 2003, 2004, adult males, collector unknown (purchased by a Mr. Linden), collection date unknown (entered into museum ledger 17 November 1857) (not examined by authors).

Laemanctus longipes: Müller 1880:10.

Laemanctus deborrii: Günther 1885:54. Unjustified emendation.

Laemanctus deborrei: Cope 1887:33.

Laemanctus deborrii: Schmidt 1928:6. *Lapsus*.

Laemanctus deborrei: Alvarez del Toro 1960:201. *Lapsus* for generic name.

Laemanctus longipes deborrei: McCoy 1968:668. First use of trinomial.

Laemanctus longipes: Alvarez del Toro 1973:56. *Lapsus* for generic name.

Laemanctus longipes deborrei: Alvarez del Toro 1973:167. *Lapsus* for generic name.

• **DEFINITION.** The gular fold is complete, mean number of scales around midbody is 43 (34–47), and the maximum known SVL is 143 mm (McCoy 1968).

3. *Laemanctus longipes waltersi* Schmidt

Laemanctus waltersi Schmidt 1933:20. Type locality, “from Lake Ticamaya, east of San Pedro, between the Chamelecon and Ulua Rivers, Honduras.” Holotype, Field Museum of Natural History, Chicago (FMNH) 5213, an adult female, collected by K.P. Schmidt and L.L. Walters, 20 April 1923 (examined by JRM).

Laemanctus longipes waltersi: McCoy 1968:670. First use of trinomial.

• **DEFINITION.** The gular fold is absent or incomplete, mean number of scales around midbody is 33 (31–36), and the maximum known SVL is 124 mm.

• **ACKNOWLEDGMENTS.** H. Landsberg provided collecting data for the holotype and G. Lenglet data for the syntypes of *L. l. deborrei*. J.A. Campbell provided information about the species on the Pacific versant of Guatemala. H. Bringsoe, S.W. Gotte, and J.A. Poindexter provided copies of publications.

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