

Sturnira thomasi. By J. Knox Jones, Jr., and Hugh H. Genoways

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Sturnira thomasi de la Torre and Schwartz, 1966

Guadeloupe Yellow-shouldered Bat

Sturnira thomasi de la Torre and Schwartz, 1966:299. Type locality Sofaia, 1200 ft., island of Guadeloupe, Lesser Antilles.

CONTEXT AND CONTENT. Order Chiroptera, Family Phyllostomatidae, Subfamily Stenoderminae. The genus *Sturnira* contains about 10 species and is confined to the tropical and subtropical regions of the New World. *Sturnira thomasi* is a monotypic species.

DIAGNOSIS. Size medium for members of the genus but large with respect to other taxa of *Sturnira* occurring in the Antillean region; skull (figure 1) long and relatively narrow, with long rostrum; minute third lower molar lacking on one or both sides in most known specimens.

GENERAL CHARACTERS. External and cranial measurements in millimeters of the adult male holotype, two adult females, and a young adult female (after Genoways and Jones, 1975) are, respectively: length of head and body, 80, 80, 81, 82; length of hind foot, 16, 15, 15, 13; length of ear, 18, 17, 19, 19; length of forearm, 48.1, 46.1, 47.7, 45.9; greatest length of skull, 26.2, 24.9, 25.1, 25.3; condylobasal length, 24.7, 22.9, 23.6, 23.3; zygomatic breadth, 12.7, 12.2, 12.5, 12.1; mastoid breadth, 12.1, 11.7, 11.8, 11.7; breadth of braincase,—, 9.8, 9.6, 9.8; interorbital constriction, 6.3, 5.9, 6.0, 5.7; postorbital constriction, 6.0, 5.5, 5.9, 5.7; length of maxillary tooththrow, 7.7, 6.9, 6.9, 7.0; breadth across upper molars, 8.2, 8.0, 8.0, 8.1; length of mandibular tooththrow (i-m2), 7.8, 7.7, 7.8, 7.7.

The color of the male holotype of *S. thomasi* was described as "dark golden brown" dorsally and "yellowish-buff with thick, silky hair" ventrally. Two adult females were described by Genoways and Jones (1975) as "dark brownish dorsally"; one was that color ventrally and the other was somewhat paler, "having a greater suffusion of buff." A young adult female was paler dorsally than the adults and pale buffy brown ventrally. A juvenile female was dark grayish brown dorsally and dark ventrally, and hairs on the venter were frosted with buff or gray.

The usual dental formula is $i\ 2/2$, $c\ 1/1$, $p\ 2/2$, $m\ 3/2$, total 30, but a minute (additional) third lower molar may be present in one or both lower jaws.

DISTRIBUTION. *Sturnira thomasi* is known only from the Lesser Antillean island of Guadeloupe (not mapped), which constitutes the northernmost distribution of the genus in the Antillean region. Islands to the south of Guadeloupe (Dominica, Martinique, St. Lucia, St. Vincent) are occupied by subspecies of the wide-ranging *S. lilium*. No fossils of *S. thomasi* are known.

FORM. Three of the five known specimens of *S. thomasi* lack a lower third molar, one has this tooth present only on the left side, and the fifth possesses a small third molar in both lower tooththrows.

The dorsal pelage is composed of hairs approximately 8 mm long, whereas those of the venter are about 6 mm in length.

ECOLOGY. Little is known of the ecology of *S. thomasi*. Presumably it is predominantly frugivorous as are other members of the genus. The male holotype "was the only specimen taken in a net set in a deep ravine" that was located in "an area of extremely dense forest" (de la Torre and Schwartz, 1966). Four females collected on Guadeloupe in late July of 1974 were netted in the following situations (Genoways and Jones, 1975): one over a boulder-strewn river in rain forest near the base of the Basse-Terre mountain range; two at a lower elevation nearby, over a large stream lined with gallery

forest; and one on the slope of the Sufrière where banana groves gave way to tall forest. Other bat species taken at these same locations included *Artibeus jamaicensis*, *Ardops nicholli*, *Brachyphylla cavernarum*, and *Molossus molossus*.

Two of the July-taken females were lactating adults, one was a subadult, and the other a juvenile (unfused phalangeal epiphysis). Two were parasitized externally by batflies.

GENETICS. A description of the karyotype of *S. thomasi* has not yet been published, but it does not differ appreciably from the karyotypes described previously for other species of *Sturnira* (fide Robert J. Baker).

ETYMOLOGY. The generic name *Sturnira* is derived from the Latin word *sturnus*, meaning starling, and possibly coined "in memory of the 'starling', consort of H.M.S. 'sulphur' on the voyage to Brazil and the Pacific in 1836, when the type specimen was collected" (Palmer, 1904). The specific

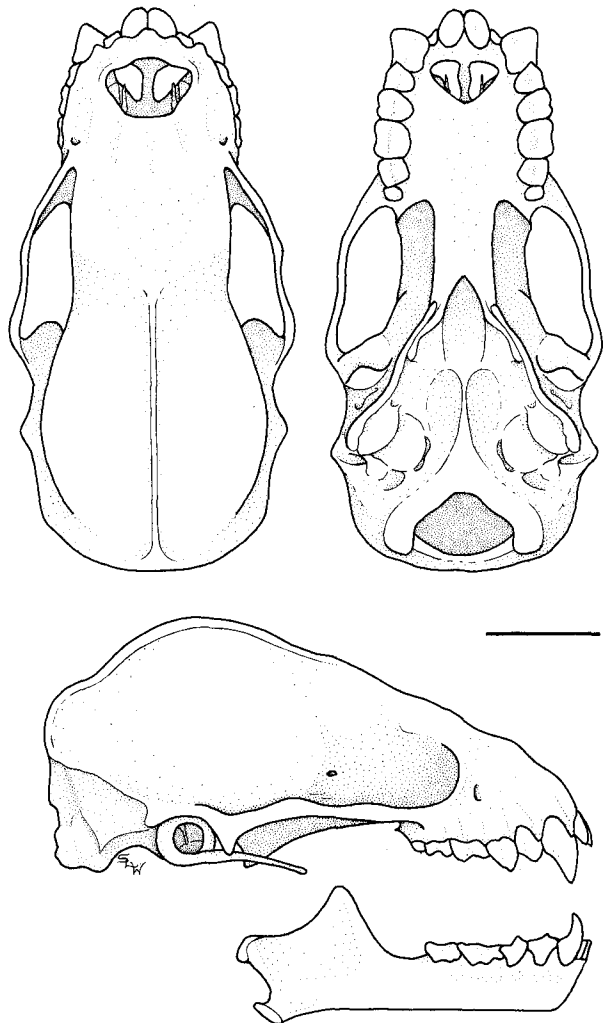


FIGURE 1. Dorsal and ventral views of cranium (above), and lateral views of cranium and mandible (below) of *Sturnira thomasi* (female, TTU 19907) from Guadeloupe. The scale represents 5 millimeters.

name *thomasi* honors the collector of the holotype, Richard Thomas.

REMARKS. Morphologically, *S. thomasi* resembles in many ways *Sturnira* from Lesser Antillean islands to the south of Guadeloupe that have been regarded as populations of *S. lilium* by several recent authors. Koopman (1968), for example, was "inclined to regard [bats on the southern islands] and even *thomasi* as successive modifications of *lilium* out of contact with other species of *Sturnira*." However, *thomasi* differs from samples from other Antillean islands to a much greater degree than any of those differ from each other, being especially distinctive in having a long, narrow skull.

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