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Notes on the type specimens of Artibeus jamaicensis planirostris (Spix, 1823)

(Mammalia, Chiroptera, Phyllostomidae)

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1. Introduction

The literature is discrepant on the identification and location of specimens of *Artibeus jamaicensis planirostris* (Spix). SPIX, in his original description of the species (1823, p. 66), gave some external measurements, but failed to identify any representative specimens. WAGNER (1840, p. 403) found three original alcohol-preserved specimens of *Phyllostoma planirostris* of Spix' chiropteran collection in the zoological museum in Munich, but classified them as *Phyllostoma perspicillatum* (Geoffroy).

In 1865, PETERS from Berlin inspected SPIX' collection, finding only a single original specimen of *Phyllostoma planirostris* (1865, p. 587).

ANDERSEN (1908) never examined any specimens, but described the species from information he received in a letter in 1906 from Mr. LEISEWITZ, mammalian curator in the Munich museum. The letter contained the description of a single specimen (inventory number 65 and registration year 1830), which ANDERSEN concluded was the sole representative of *Phyllostoma planirostris*. The other two specimens found earlier by WAGNER were identified as *Artibeus lituratus* (Olfers).

CARTER and DOLAN, in their "Catalogue of Type Specimens of Neotropical Bats in Selected European Museums" (1978), located only a single specimen of *Phyllostoma planirostris* in the Munich museum, now the Zoologische Staatssammlung München (ZSM), consisting of a skull and partial skeleton, with classification number 66 and a additional inventory number 1903/9428 on the label attached to the skeleton. They assumed that the skin had been lost.

At present, there are two original specimens of *Phyllostoma planirostris* at the ZSM, both complete with skin, skull, and skeleton. One specimen is that found by CARTER and DOLAN (with the exception of the skin) and bears the handwritten inventory number 1903/9438 in contrast to 1903/9428, as indicated by CARTER and DOLAN. The additional number 66 is written on the cranium and mandible as well as on a red label attached to the skeleton. The second specimen, overlooked by CARTER and DOLAN, bears the inventory number 1903/9437. Label inscriptions designate both specimens as part of SPIX' original collection. It is assumed by the author that these are two of the three specimens identified by WAGNER in 1840 (cit. ab.), whereas the third is probably lost. There are presently no

specimens of *Artibeus lituratus* (Olfers) in the original chiropteran collection of SPIX at the ZSM (s. KRAFT, 1982).

2. Description

Phyllostoma planirostre Spix, 1823, Sim. et Vesp. bras. spec. novae..., p. 66, pl. 36, fig. 1. Type locality: "in suburbiis Bahiae", now know as Salvador, Brazil. Collector: apparently Spix. Date of capture not specified.

Type specimens:

1903/9438 (add. no. 66) (lectotype): adult of unknown sex; skin, skull and partial skeleton (axial skeleton, pectoral girdle and rib cage).

skull (fig. 1): zygomata broken, left bulla missing. Front part of premaxillaries somewhat damaged, two incisors lost, one of the inner incisors (with distinctly bilobed cutting edge) insert into the alveolus of the left outer incisor. Dental formula: $\frac{2122}{2123}$, m^3 missing on both sides. Both outer incisors in the lower jaw lost.

skin: faded, otherwise in good condition. Upper parts *Light Buff* to *Cinnamon Brown*, under parts *Pale Ochraceous-Buff* to *Cinnamon Brown*, wing membranes *Mummy Brown* with stripes along the metacarpals and tips bleached out to *Light Buff* (colors from RIDGWAY, 1912). Facial stripes not recognizable.

Label inscriptions: white handwritten label on the skeleton: "$\frac{1903}{9438}$ Bibia / aus Alkohol (Skelett.) / Spix. coll. **Type**", (Bibia seems apparently misspelling of Bahia), white handwritten label on the skin: "Phyllostoma planirostrum / $\frac{1903}{9438}$ aus Alkohol Spix Balg. / Bahia Spix. coll. **Type**", the backside of this label bears the notation "Nr. 190", additional red label on the skeleton with pencilled notation "Nr. 66".

1903/9437 (paralectotype): adult or juvenile of unknown sex; skin, skull and partial skeleton (as in 1903/9438).

skull (fig. 2): zygomata broken, teeth relatively unworn, dental formula $\frac{2123}{2123}$, rudimentary m^3 present on both sides.

skin: condition and coloration the same as in 1903/9438.

Label inscriptions: white handwritten label on the skeleton: "$\frac{1903}{9437}$ Artibeus perspicillatus L. /Bahia. aus Alkohol (Skelett) / Spix coll." White handwritten label on the skin with similar text.

All four white labels were written by P. Rockinger, a technician in the department of mammology at the ZSM during 1903–1927. A handwritten diary of his work at the ZSM contains the entry: "Alkoholmaterial zu Bälgen verarbeitet," and therefore it is assumed that he prepared skins from the original alcohol-preserved specimens.

3. Measurements

The first measurement is that for the lectotype 1903/9438, the second for the paralectotype 1903/9437. All measurements are given in millimeters.

Head and body: 85.0, 78.0; forearm (including carpals): 63.8, 59.9; skull: greatest lenght: 29.7, 27.8; condylobasal length: 27.2, 24.7; breadth of cranium: 13.0, 12.6;

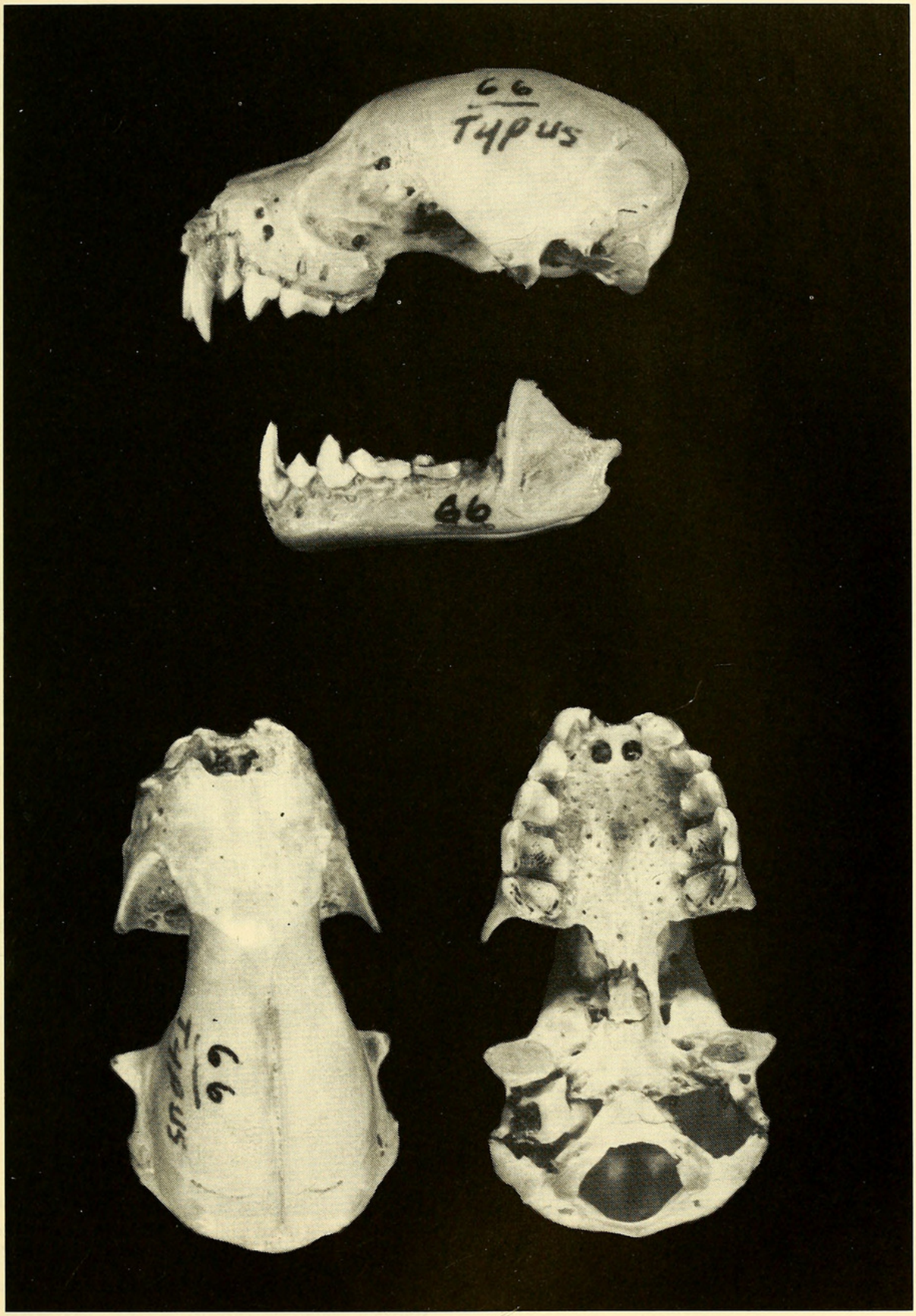

Fig. 1: *Artibeus jamaicensis planirostris* Spix, lectotype No. 1903/9438. Note absence of third upper molar.

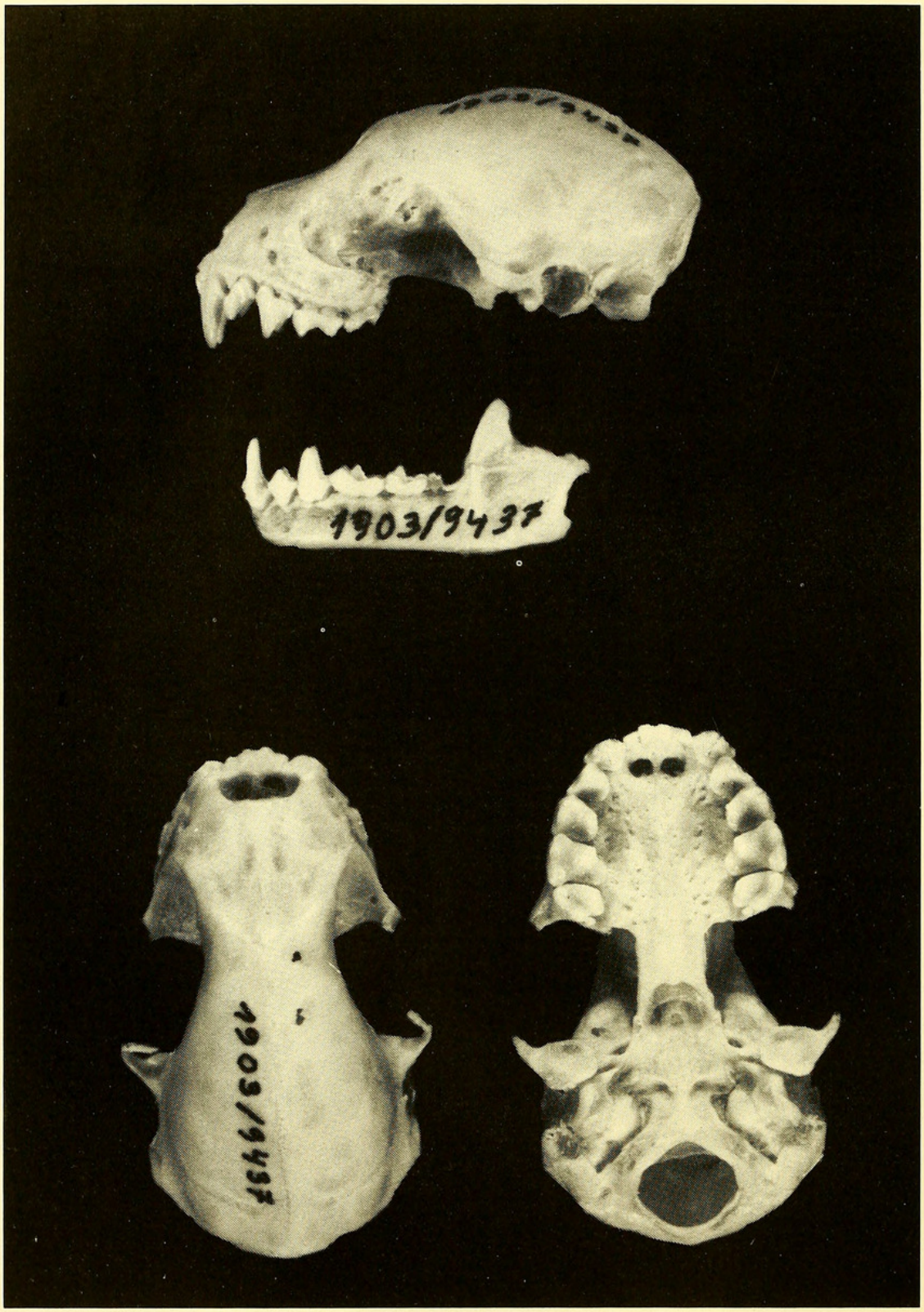

Fig. 2: *Artibeus jamaicensis planirostris* Spix, paralectotype No. 1903/9437. Note presence of third upper molar.

height of cranium: 12.1, 11.7; mastoid breadth: 16.2, 15.1; postorbital constriction: 7.5, 7.1; greatest breadth across upper molars: 13.6, 12.6; width across cingula of canines: –, 8.0; upper tooth row c–m^2 (m^3 resp.): 12.9, 10.8; greatest length of mandible: 21.5, 19.1.

Carter and Dolan (1978) indicated for the specimen 1903/9438 a measurement of 30.9 mm for greatest length of skull, in contrast to 29.7 mm as measured by the author. Apparently Carter and Dolan measured the length to the tips of the protruding canines instead of the most anterior point of the premaxillary bone, as is the more common practice (e. g. Husson 1978, Freeman 1981).

The measurements of Spix in his original description of the species do not correspond with either of the specimens at the ZSM. Probably Spix' measurements were taken from a third, lost specimen. Therefore, I designated the specimen 1903/9438 as lectotype, because the corresponding one 1903/9437 is possibly juvenile or subadult.

4. Status and distribution of *planirostris* (Spix)

Phyllostoma planirostris Spix is currently recognized as a subspecies of *Artibeus jamaicensis* (Leach, 1821) according to Hershkovitz (1949). Measurements of both type specimens fall within the limits given for this species (e. g. Anthony 1918, Sanborn 1936, Hershkovitz cit. ab., Felten 1956). The dental formulas of both type specimens confirm Hershkovitz' contension that the presence or absence of the vanishing third upper molar is of no taxonomic significance, but may be an individual as well as a geographical variable.

Infraspecific variation in *A. jamaicensis* is well understood only in North and Central America (Jones and Carter 1976, Davis 1970). Identifying features of *planirostris* Spix have not been compared to those of neighboring South American subspecies e. g. *fraterculus* (Anthony) in Ecuador and Peru (Ortiz De La Puente, 1951) and *jamaicensis* (Leach) in Colombia (Hershkovitz 1949). Aellen (1970) is unsure whether specimens of *jamaicensis* have been collected in SW-Colombia. The precise distribution of *Artibeus jamaicensis planirostris* (Spix) in South America is thus unknown. Vieira (1942) reported the subspecies from Salvador (formerly Bahia), Brazil, Myers and Wetzel (1979) from SE Paraguay, Baud (1981) from SE and NE Paraguay and Peracchi and Albuquerque (1971) from Rio de Janeiro, Brazil.

Zusammenfassung

Der Chiropterenrevision von Wagner (1840, S. 403) ist zu entnehmen, daß der Beschreibung von *Phyllostoma planirostris* Spix, 1823, drei Exemplare dieser Art zugrunde liegen, die Spix auf seiner Brasilienreise in den Jahren 1817–1820 gesammelt und an das Münchner Museum gebracht hatte. Entgegen anderslautenden Literaturangaben befinden sich von diesen derzeit noch zwei Exemplare in der Zoologischen Staatssammlung München, die in der vorliegenden Arbeit beschrieben und als Lecto- bzw. Paralectotypus festgelegt werden.

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