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Authors: Hice, Christine L., and Solari, Sergio

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SHORT NOTES

First record of *Centronycteris maximiliani* (Fischer, 1829) and two additional records of *C. centralis* Thomas, 1912 from Peru

CHRISTINE L. HICE¹ and SERGIO SOLARI²

¹The Museum, Texas Tech University, Lubbock, TX 79409, USA; E-mail: cebuella@terra.com.pe

²Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima, Peru

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The genus *Centronycteris* (Emballonuridae) is known from fewer than 50 individuals (Carter and Dolan, 1978; Simmons and Handley, 1998). Of these, half (24) are from 17 different localities in South America (Simmons and Handley, 1998). Such scanty records make difficult delimiting distributions of the two species of *Centronycteris*. Herein, we report additional localities for *C. maximiliani* and *C. centralis*.

An adult male *Centronycteris maximiliani* was shot by J. Alvarez at the Estación Biológica Allpahuayo (03°58'S, 73°25'W), approximately 171 m a.s.l., 25 km SW, Iquitos, Maynas, Loreto, in white sand forest, on 1 November 1998. The bat was found roosting on a tree trunk at a height of approximately 10 m. The specimen consists of a skin, skull, and complete skeleton, and is deposited at the Museo de Historia Natural of the Universidad Nacional Mayor de San Marcos in Lima, Peru (MUSM 16464). It is the first Peruvian record of this species, extending its range west by 1000 km (cf. Simmons and Handley, 1998). Previous indications of this species in Peru (Tuttle,

1970; Koopman, 1978; Pacheco *et al.*, 1995) lack voucher specimens or were subsequently reidentified by Simmons and Handley (1998).

Two individuals of *Centronycteris centralis* were collected in southeastern Peru. The first, a pregnant adult female (embryo = 28 mm), was collected on 23 September 1997 at the Zona Reservada Tambopata-Candamo, Sandia, Puno, in an open forest on a low hill (13°21'S, 69°59'W, approx. 500 m a.s.l.). No external measurements are available for this specimen, which consists of a skull and skeleton (MUSM 16147). The second specimen, a lactating adult female, was collected on 30 November 1997 near Camisea (11°53'S, 72°39'W, approx. 694 m a.s.l.), La Convención, Cuzco. The individual was captured in a net set at a height of 5 m across a small creek inside a mature forest and was preserved as an alcoholic specimen with the skull removed (MUSM 13605). These records extend the range of this species more than 600 km to the southeast, with the nearest previously reported locality being Chanchamayo, Junín, Central Peru (Simmons and Handley, 1998).

TABLE 1. External and craniodental measurements (in mm except for body mass in g) for three specimens of *Centronycteris* from Peru, housed in the Museo de Historia Natural of the Universidad Nacional Mayor de San Marcos (MUSM) in Lima, Peru

Character	<i>centralis</i>		<i>maximiliani</i>
	13605 (♀)	16147 (♀)	16464 (♂)
Body mass	7	—	7
Total length	79	—	59
Tail length	26	—	15
Hind foot length	8	—	7
Ear height	21	—	16
Tragus height	8	—	—
Forearm length	51	—	45
Condyl canine length	15.70	14.99	13.87
Zygomatic breadth	10.21	9.98	8.75
Maxillary toothrow length	7.06	6.75	6.17
Breadth across molars	7.49	7.31	6.94
Lower molar row length	4.11	4.29	3.67

Simmons and Handley (1998) anticipated larger geographic ranges for both species of *Centronycteris*, with possible sympatry in the Amazon basin or the evergreen forests of Venezuela. Although we have not documented sympatry of these species, their ranges may overlap in northeastern Peru.

Information on reproduction in *Centronycteris* is sparse at best, with four pregnant individuals of *C. centralis* captured previous to our records, only one of which is from South America (Simmons and Handley, 1998). Of the specimens reported herein, one female (MUSM 16147) was carrying a near-term embryo at the beginning of the wet season (September) and the other (MUSM 13605) was lactating in the middle of the wet season (November). This suggests parturition for this species is at the beginning of the wet season, a pattern that characterizes other emballonurid bats in the Amazon Basin (Graham, 1987).

Sanborn (1937) noted that specimens of *C. centralis* from Ecuador were larger than those from Central America and Brazil. The significance of this pattern is unclear, but craniodental measurements (Table 1) of our

specimens, especially those of the specimen from Camisea, exceed the range reported by Simmons and Handley (1998). As shown by those authors, *C. centralis* is larger than *C. maximiliani*. Our specimens, from an area in which *C. maximiliani* and *C. centralis* appear to overlap, also confirm most of the cranial distinctions between the two species, as described by Simmons and Handley (1998). In *C. maximiliani* the basisphenoidal pits were well developed and conspicuous, as was the dorsolateral swelling of the maxilla in lateral view. However, the shape of nasals and maxilla of our specimen were more similar to their figure of *C. centralis*.

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LITERATURE CITED

- CARTER, D. C., and P. G. DOLAN. 1978. Catalogue of type specimens of Neotropical bats in selected European museums. Special Publications of the Museum, Texas Tech University, 15: 1–136.
- GRAHAM, G. L. 1987. Seasonality of reproduction in Peruvian bats. Pp. 173–186, in *Studies in Neotropical mammalogy: essays in honor of Philip Hershkovitz* (B. D. PATTERSON and R. M. TIMM, eds.). Fieldiana: Zoology (N.S.), 39: 1–506.
- KOOPMAN, K. F. 1978. Zoogeography of Peruvian bats with special emphasis on the role of the Andes. *American Museum Novitates*, 2651: 1–33.
- PACHECO, V., H. DE MACEDO, E. VIVAR, C. ASCORRA, R. ARANA, and S. SOLARI. 1995. Lista anotada de los mamíferos del Perú. *Occasional Papers in Conservation Biology*, 2: 1–35.
- SANBORN, C. C. 1937. American bats of the subfamily Emballonurinae. *Field Museum of Natural History, Publications in Zoology*, Ser. 20: 321–354.
- SIMMONS, N. B., and C. O. HANDLEY, JR. 1998. A revision of *Centronycteris* Gray (Chiroptera: Emballonuridae) with notes on natural history. *American Museum Novitates*, 3239: 1–28.
- TUTTLE, M. D. 1970. Distribution and zoogeography of Peruvian bats, with comments on natural history. *University of Kansas, Sciences Bulletin*, 49: 45–86.

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The publication dates of *Plecotus alpinus* Kiefer and Veith, 2002 and of *Plecotus microdontus* Spitzenberger, 2002

DIETER KOCK

Forschungsinstitut Senckenberg, Senckenberganlage 25, D-60325 Frankfurt am Main, Germany
E-mail: dkock@senckenberg.de

Key words: Chiroptera, *Plecotus alpinus*, *Plecotus microdontus*, priority

Recently, two new taxa of *Plecotus* E. Geoffroy, 1818, were described almost simultaneously as species group names: *Plecotus alpinus* Kiefer and Veith, 2002 and *Plecotus microdontus* Spitzenberger in Spitzenberger *et al.* (2002). Both names identify one and the same cryptic Alpine species. As one of the publication dates is apparently misleading, it is deemed necessary to establish the respective dates by which the two names became available, and which one is the senior name to be used for the Alpine *Plecotus* species.

(1) The issue of the journal ‘Myotis’ containing the description of *Plecotus alpinus* carries the date 31st December, 2001. However, this issue was actually mailed only on April 16th, 2002 (Editor Dr. R. Hutterer, ZFMK Bonn, in litt.). By this date the valid description and the scientific name *alpinus* became publicly available.

(2) A printed matter carrying on its top the quotation of the journal ‘Nat[ura]. Croat[ica]. / vol. 11 / No. 1 / 1–18 / Zagreb / March 31, 2002’, presents a paper by Spitzenberger *et al.*, containing the valid description and the scientific name