**Pipistrellus brunneus**  
**DARK-BROWN PIPISTRELLE**  
Fr. Pipistrelle brune; Ger. Dunkelbraune Zwergfledermaus

**Taxonomy**  

**Description**  
Very small microbat without noseleaf and with tail more or less fully enclosed in interfemoral membrane; four upper cheekteeth, five lower cheekteeth and two upper incisors on each side; ears separated and short (9–15 mm); FA: 33–38 mm; wings blackish-brown without white hind-border; dorsal pelage dark; dorsal hairs unicoloured, ventral hairs bicoloured; lower molars myotodont; inner upper incisor unicuspid; profile of forehead region of skull weakly concave; posterior margin of tragus sharply angular. Sexes similar. Pelage dense, soft. Dorsal pelage varying from medium brown, reddish-brown to dark chocolate brown; hairs unicoloured. Ventral pelage shorter and paler; hairs blackish-brown with pale greyish-brown tips or medium-brown tips. Buccal glands sometimes very prominent. Ears blackish, subtriangular with rounded tip. Tragus length ca. 40% of E and broad; anterior margin short and straight; posterior margin with sharp angle giving tragus a diagonally truncated appearance (Figure 136a). Thumb comparatively long and slender for a *Pipistrellus*. Wing-membranes blackish-brown without white hind-border. Because wing colour was not mentioned in the type description, and because the wings of the holotype were bleached by preservative, *P. brunneus* was grouped with the pale-winged species (*P. renelli*, *P. tenuipinnis*) (e.g. Rosevear 1965), but Koopman (1965) and De Vree (1971) showed that it is dark-winged. Bacular morphology: no information.

Skull large and robust for an African *Pipistrellus*. Braincase domed, relatively high but of medium relative breadth; interorbital region relatively narrow; rostrum of medium relative length and breadth (Table 25, p. 603). Profile of forehead region (viewed laterally) weakly concave. Sagittal and lambdoid crests very weakly developed; no occipital helmet. Inner upper incisor unicuspid (without accessory cusp at posterior base of tooth (cf. *P. renelli*). Outer upper incisor ca. one-quarter to one-third height of inner incisor (usually reaching only slightly above cingulum of inner incisor). Anterior upper premolar absent. Lower molars myotodont. Dental formula: usually $2\{11/3\} = 32$.

**Geographic Variation**  
Apparently none.

**Similar Species**  

**Distribution**  
Endemic to Africa. Recorded mainly from the Rainforest BZ (Western and West Central regions), but also recorded marginally from the Rainforest–Savanna Mosaic and, in Côte d’Ivoire, from the Guinea–Savanna BZ. There are ca. 22 records from Sierra Leone, Liberia, Côte d’Ivoire, Ghana, SE Nigeria, Cameroon, Equatorial Guinea, Gabon (Cape Esterias; V. Van Cakenberghe pers. comm.) and DR Congo. Specimens from Nko, Nigeria in BMNH, published as *Eptesicus brunneus* by Sanderson (1939), Rosevear (1965), Hayman & Hill (1971) and Happold (1987), represent *P. renelli* (De Vree 1973a, Hill & Harrison 1987). The only known specimen from the central Congo Basin (Lukolela, AMNH) was identified as *P. brunneus* by Koopman (1965). This record appears to be rather isolated and the specimen should be re-examined.
Family VESPERTILIONIDAE

Habitat  Apparently one of the most specialized rainforest vespertilionids, known almost exclusively from localities in undisturbed to slightly disturbed lowland rainforests. Within the Rainforest BZ, has been recorded mainly from both evergreen and semi-deciduous lowland rainforests, but also from swamp forest, and mangroves. Two other records are from riverine forest within the Rainforest–Savanna Mosaic (Comoé N. P., Côte d’Ivoire). Although mostly found at low altitudes, a record from Bake River bridge, Cameroon, is located at ca. 1470 m in sub-montane forest.

Abundance  Localized but apparently not rare in suitable habitat.

Adaptations  No information.

Foraging and Food  No detailed information. Presumably forages by slow-hawking (as in other Pipistrellus). In Tāi N. P. and Comoc N. P., Côte d’Ivoire, mostly caught in harp-traps or mist-nets near small forest creeks and in elevated mist-nets 0–25 m above ground, in tree-fall gaps within the forest. Individuals were caught at a median height of 9 (1–21) m (n = 9) (J. Fahr unpubl.). Diet not known.

Echolocation  No information.

Social and Reproductive Behaviour  No information.

Reproduction and Population Structure  Litter-size: one (n = 1). Reproductive chronology not known (data inconclusive). At 05°50’ N (Tāi N. P., Côte d’Ivoire), 4 of 5 ♂ ♀ had scrotal testes between Feb and Mar; 1 of 1 ♀ was pregnant in late Sep; 1 of 1 was lactating in late Feb and one was lactating in early Mar, and 1 of 1 was neither lactating nor pregnant in late Aug (Lim & Van Coeverden de Groot 1997, J. Fahr unpubl.). At 05°22’ N (Banco N. P., Côte d’Ivoire) 1 of 2 ♀ ♀ was pregnant, the other was neither lactating nor palpably pregnant, and 2 of 2 ♂ ♂ had scrotal testes in mid-Sep. At 09°40’ N (near Fintonia, Sierra Leone), two lactating ♀ ♀ were collected in late Apr (total number of captured ♀ ♀ not known). (USNM). In a sample of eight bats from Tāi N. P., the ratio of ♂ ♂ to ♀ ♀ was 1 : 1.7, and in 15 museum specimens from West Africa, the ratio was 1 : 1.5.

Predators, Parasites and Diseases  Ectoparasites include a batfly Basilia echinata (Diptera: Nectaribiidae) (Anciaux de Faveaux 1984).

Conservation  IUCN Category: Near Threatened.

Measurements  Pipistrellus brunneus  
FA: 34.9 (33–38) mm, n = 29  
WS (c): 237 (225–256) mm, n = 5  
TL: 84.5 (76–94) mm, n = 18  
T: 37.9 (33–46) mm, n = 18  
E: 12.7 (9–15) mm, n = 18  
Tr: 5.1 (4.8–5.5) mm, n = 7  
Tib: 13.2 (12–15) mm, n = 21  
HF: 8.0 (7.0–9.5) mm, n = 22  
WT: 5.9 (4.0–9.0) g, n = 22  
GLS: 13.5 (13.0–14.1) mm, n = 25  
GWS: 8.9 (8.6–9.2) mm, n = 21  
C–M3: 4.9 (4.6–5.3) mm, n = 27  
C–M3 (alv.): 4.9 (4.4–5.5) mm, n = 36*  
Sierra Leone, Côte d’Ivoire, Ghana, Nigeria (incl. holotype), Cameroon, Equatorial Guinea (Rio Muni) (BMNH, FC, CM, RMAC, ROM, SMF, USNM, DeVree 1973a)  
*Throughout geographic range (V. Van Cakenberghe pers. comm.)

Key References  DeVree 1973a; McBee et al. 1987.

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