Xerus erythropus (Geoffroy Saint-Hilaire, 1803)
Striped Ground Squirrel

Sciurus albovittatus Desmarest, 1817:110. Type locality “probablement de l’Inde.”
Sciurus leucoumbrius Rüppell, 1835:38. Type locality “Sennar und Kordofan,” Sudan.
Sciurus (Sciurus) marabatus Lesson, 1838:467. Type locality “Senegal.”
Sciurus (Sciurus) prestigiator Lesson, 1838:467. Type locality “Senegal.”
Xerus trivittatus Fitzinger, 1867:483. Part.


CONTEXT AND CONTENT. Order Rodentia, suborder Sciurognathi, family Sciuridae, subfamily Sciurinae, tribe Xerini (Moore 1959), genus Xerus, subgenus Euxerus. Six subspecies are recognized (Amtmann 1975).

X. e. chadensis Thomas, 1905:387. Type locality “Yo, Lake Chad.”
X. e. erythropus (E. Geoffroy Saint-Hilaire, 1803:178), see above (agaduus Thomas and Hinton, 1921:6; albovittatus Desmarest, 1817:110; lessonii Fitzinger, 1867:483; maestus Thomas, 1910:419; marabatus Lesson, 1838:467; and prestigiator Lesson, 1838:468 are synonyms).

X. e. lacustris Thomas, 1905:388. Type locality “Masindi, Unyoro.”
X. e. leucoumbrius (Rüppell, 1835:38), see above.
X. e. limitaneus Thomas and Hinton, 1923:255. Type locality “Zalingei, mouth of Wadi Aritu, 2800.”
X. e. microdon Thomas, 1905:389. Type locality “British East Africa Kitui, alt. 1000 m.” (fulgor Thomas, 1905 is a synonym).

DIAGNOSIS. Xerus erythropus can be distinguished from X. rutilus, with which it is sympatric over part of Uganda, Sudan, and Kenya, by presence of a well-defined white or buffy lateral stripe from shoulder to rump (Fig. 1) and by its larger size (Kingdon 1974). Length of head and body is 300–460 mm and body mass is 500–1000 g in X. erythropus compared to 200–255 mm and 300–335 g, respectively, in X. rutilus (Kingdon 1974). X. erythropus can be distinguished from X. inauris and X. princeps by 3, rather than 2, pairs of mammae (Amtmann 1975). Baculum of X. erythropus is distinguished from that of conegers by a narrow upper edge on distal portion (Pocock 1923). An acrocentric Y chromosome distinguishes the karyotype of X. erythropus from those of X. inauris, X. princeps, and X. rutilus, in which the Y chromosome is meta-centric (Baskievich 1997; Dobigny et al. 2002; Robinson et al. 1986).

GENERAL CHARACTERS. Xerus erythropus is pale sandy to reddish and brown, with shades varying from lighter in drier areas of its distribution to darker in the more humid, southern part of its range (Dorst and Dandelot 1970). Pelage, except on tail, is short, coarse and bristly, and lies close to body (Rosevear 1969). Hairs are flat in cross-section, longitudinally grooved for part or all of their length, and distributed in groups of 3 (Rosevear 1969). Underparts are whitish and sparsely furred, whereas dorsum is darker and appears flecked. A lateral white stripe, composed of all-white hairs, runs from shoulder to rump (Rosevear 1969). Tail is bushy and is covered by long (up to 50 mm) multi-colored hairs that form alternating light and dark bands (Dorst and Dandelot 1970; Rosevear 1969). Tail hairs fan out sideways, rather than bushing out evenly all around (Rosevear 1969). Tail length is reported as about as long as head and body (Dorst and Dandelot 1970) or as shorter (Rosevear 1969). Ears are small. Muzzle is long, blunt, and well furred, with a projecting nose (Kingdon 1997). White lines are present above and below each eye; the lower line is less well-defined (Ewer 1966; Rosevear 1969). Limbs and feet are paler than dorsal pelage (Rosevear 1969). Feet are large and powerful, with long, flat, relatively straight claws (Rosevear 1969).

Mean measurements (in mm, ranges in parentheses) of mature specimens (sample size not reported) in the British Museum of Natural History (Rosevear 1969) are as follows: length of head and body, 235 (223–290); length of tail, 219 (185–262); length of hind foot, 62 (58–69); length of ear, 16 (14–19). Cranial measurements are: skull length, 60.8 (57.1–65.7); interorbital breadth, 15.7 (13.9–17.1); length of upper molar row, 12.3 (11.5–12.9); incisor to 3rd molar, 23.4 (26.9–31.8). Volumes of braincases of 44 adult X. erythropus (sexes combined) average 6.04 ± 0.08 cm³ (X ± SE — Roth and Thornton 1982). Body masses of 47 adult X. erythropus (sexes combined) average 302.4 ± 7.7 g (X ± SE — Roth and Thornton 1982).

DISTRIBUTION. The striped ground squirrel is endemic to Africa (Fig. 3) and ranges from Mauritania to southwestern Ethiopia and Kenya (Kingdon 1974). Because of its close association with cultivated land, the range and habitat of this species is expanding in Kenya (Key 1990a).

Subspecies distributions are as follows: X. e. chadensis from southeastern Niger, northeastern Nigeria, northeastern Cameroon, Chad, and Sudan; X. e. erythropus from Senegal and southern Mauritania to northeastern Nigeria, invading the high forest zone, also in southeastern Morocco; X. e. lacustris from northeastern Congo and northwestern Uganda; X. e. leucoumbrius from western Sudan, southwestern Ethiopia, and probably northeastern Uganda and northwestern Kenya; X. e. limitaneus from Sudan and probably southeastern Chad and northeastern Central African Republic; and X. e. microdon from southwestern Kenya (Amtmann 1975).

FOSSIL RECORD. Xerus erythropus fossils were recovered from the Upper Pliocene, members B and C of the Shungura Formation, lower Omo Valley, Ethiopia (Wesselman 1964).

FORM AND FUNCTION. Dental formula is 1/1, 0/0, 2/1, 3/3, total 22. Peglike extra upper premolar is a poor diagnostic character because it often erupts late and can be shed soon after (Rosevear 1969). Upper molars have well-developed transverse ridges and hollows bounded by an internal heel; lower molars are deeply divided by a transverse cleft, giving the appearance that each is composed of 2 laminae (Rosevear 1969). Incisors are yellow and ungrooved (Rosevear 1969).

Fig. 1. Xerus erythropus from Nigeria. Photograph by D. C. D. Happold.