Mydaus marchei. By Yeen Ten Hwang and Serge Larivière

Published 15 December 2004 by the American Society of Mammalogists

Mydaus marchei Huet, 1887
Palawan Stink Badger

Mydaus marchei Huet, 1887:149. Type locality “île Palaouan,” = Philippine Islands, Palawan (vide Lawrence 1939).
Mydaus schadenbergii Jentink, 1895:46. Type locality “Calamianes-Islands,” = Calamian Islands.
Suillotius marchei: Lawrence, 1939:65. Name combination.

CONTEXT AND CONTENT. Order Carnivora, family Mephitidae (Dragoo and Honeycutt 1997). The species is monotypic.

DIAGNOSIS. Mydaus marchei (Fig. 1) can be distinguished from M. javanensis, the only other species in the genus, by its smaller size (length of body, 320–460 mm; body mass, 2.5 kg), smaller ears, shorter tail (15–45 mm), and larger teeth (Lawrence 1939; Long and Killingley 1983). M. marchei also has brown to black upperparts and brown undertails, whereas M. javanensis has blackish fur in both regions of the body (Grimwood 1976; Hvarg and Larivière 1989). M. marchei has a scattering of white or silvery hairs on the back and sometimes on the head, whereas M. javanensis may have a complete or partial narrow white stripe down the back onto the tail and a white crown (Davis 1961; Long and Killingley 1983). Fur of M. marchei is longer and softer than that of M. javanensis (Jentink 1895).

GENERAL CHARACTERS. Mydaus marchei has a pointed face, a slightly elongated and mobile snout, short and stout limbs, plantigrade feet, strong recurved claws on front feet, and well-developed anal scent glands (Grimwood 1976; Kruuk 2000). Ears and eyes are small. Ears flap is vestigial and nearly buried in flesh of head (Grimwood 1976). Fur on nape stands erect. Tail is “square-cut” and protrudes from a prominent naked and pale anal region (Grimwood 1976). External measurements (mm) of 1 subspecies male are: total length, 352; length of tail, 35; length of hind foot, 59 (Long and Killingley 1983). Width of forehead of 1 individual (sex unknown) was 22 mm (Kruuk 2000). Body mass (in g) of 2 specimens (sex unknown) was 40.5 and 109.1 (Long and Killingley 1983). One specimen from Palawan weighed 2,240 g (Grimwood 1976).

Skull (Fig. 2) has a recurved coronoid process, an elongate rostrum, and large infraorbital canal (Long and Killingley 1983). M1 is large and P4 has a well-developed hypocone (Long and Killingley 1983). Skull measurements (mm) for 1 male from Busuanga Island are: greatest length of skull, 70.9; length of palate, 44.7; zygomatic breadth, 35.2; interorbital breadth, 17.7; length of maxillary toothrow, 21.8 (Long and Killingley 1983). Lower jaw measures 46 mm (Jentink 1895).

DISTRIBUTION. Mydaus marchei is found on Busuanga, Caluit, and Palawan Islands in the Philippines (Hearn et al. 1998; Fig. 3). M. marchei may occur on other islands within the Palawan faunal region. No fossils are known.

FORM AND FUNCTION. Mydaus marchei has a rostrally compressed brain. Olfactory bulbs are large, neocortex is not expanded, and rhinal fissure is high, suggesting an emphasis on olfaction (Long and Killingley 1983). Palawan stink badgers have 2 inguinal and 4 pectoral mammae (Long and Killingley 1983). Dental formula is i 3/3, c 1/1, p 3/4, m 1/1, total 34 (Lawrence 1939).

ECOLOGY. Litter size is 2 or 3, and young are probably reared in burrows (Long and Killingley 1983). M. marchei occupies grassland-shrub, natural damp grassland, open damp soil along streams, rice paddies, and 2nd-growth forest (Hoogstraal et al. 1951; Kruuk 2000; Long and Killingley 1983; Rabor 1986). M. marchei forages extensively in rice paddies and other damp open areas, preferring rice paddies close to shrub areas to those surrounded by other rice fields (Kruuk 2000). M. marchei makes extensive use of shrub for shelter (Kruuk 2000). Palawan stink badgers frequent roads and paths while foraging and often leave distinctive tracks with trailing scent; thus anal glands may be used for purposes other than defense (Grimwood 1976).

Mydaus marchei consumes small freshwater crabs and various insects, including mole crickets (Grillotalpa) and small beetles (Kruuk 2000). It is sometimes associated with the short-clawed otter (Amblyonyx cinereus) because both species forage on crabs in similar habitat (Kruuk 2000). Common palm civets (Paradoxurus hermaphroditus), leopard cats (Prionailurus bengalensis), and Malayman civets (Vizcerra tanguarum) may kill stink badgers (Grimwood 1976). M. marchei may harbor the nematode Blattophila (Long and Killingley 1983).

BEHAVIOR. Mydaus marchei has been described as nocturnal (Kruuk 2000), and as active both day and night (Grimwood 1976). Walk is ponderous, but an alarmed Palawan stink badger maintained a steady trot for 90 m (Grimwood 1976). M. marchei walks with left and right feet quite far apart, with hind feet falling into steps of front feet (Kruuk 2000).

When foraging, M. marchei meanders slowly,grubbing on the surface or in the top layer of soil with its piglike snout, occasionally using its long claws to scratch up small prey (Kruuk 2000). Tracks of a foraging stink badger were ca. 2 km long and connected an estimated 150 sites where the animal had dug small pits (16 cm deep) to catch invertebrates (Kruuk 2000). Stink badgers will dig in cultivated areas (Kruuk 2000). One animal was observed digging a den, in <5 min, in a dam (bund) between rice paddies (Kruuk 2000).

Mydaus marchei is not particularly aggressive (Grimwood 1976; Kruuk 2000). When confronted, it draws back its lips in a snarl and shows its heavy teeth, but appears reluctant to bite (Grimwood 1976). When approached, M. marchei foot stomps by raising each front foot ca. 8 cm off the ground and bringing each down with an audible sound (Grimwood 1976). M. marchei also respond to human presence by freezing and then wandering off to continue foraging (Kruuk 2000). One individual feigned death when first touched and allowed itself to be carried until finally squirming.
likely refers to the smell of stink badgers. The specific name mar­
chei refers to M. Marche, who 1st mentioned the species. The in­
digenous common name for M. marchei is pantot (Kruuk 2000).

B. Patterson and M. Schulenberg of the Field Museum of Nat­
ural History obtained the skull photos. D. Dyck pre­
pared the skull
photos for publi­
cation. H. Kruuk provided the photograph of the
animal. Y. T. Hwang was supported by a graduate scholarship from
the University of Saskatchewan and by the Institute for Wetland and Waterfowl Research of Ducks Unlimited Inc. An earlier draft of
this manuscript was reviewed by J. Dragoo, J. Esselstyn, and an anonymous reviewer.

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Associate editors of this account were LUI MARINELLI, KAREN McBR, and BETTY McGUIRE. Editor was VIRGINIA HAYSSAN.