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Mydaus javanensis.

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Mydaus Cuvier, 1821

Mephitis Desmarest, 1820:187. Part, not *Mephitis* É. Geoffroy St. Hilaire and G. Cuvier.
Mydaus Cuvier, 1821:1. Type species *Mydaus meliceps* Cuvier (= *Mephitis javanensis* Desmarest, 1820).
Mydaon Gloger, 1841:57. Type species unknown.
Suillotaxus Lawrence, 1939:28. Type species *Mydaus marchei* Huet.

CONTEXT AND CONTENT. Order Carnivora, family Mephitidae (Dragoo and Honeycutt 1997). The genus *Mydaus* has 2 species, *M. javanensis* and *M. marchei*. *Suillotaxus* was proposed as a separate genus for *M. marchei* (Lawrence 1939) and is now considered a subgenus (Long and Killingley 1983).

Mydaus javanensis (Desmarest, 1820)

Indonesian Stink Badger

Mephitis javanensis Desmarest, 1820:187. Type locality "l'Île de Java" Indonesia.
Mydaus meliceps Cuvier, 1821:1. Type locality "Sumatra and Java."
Mydaus lucifer Thomas, 1902:442. Type locality "mainland near Labuan, Borneo."
Mydaus ollula Thomas, 1902:443. Type locality "Sinubing and Mt. Ranai from Great Natuna Island," Indonesia.
Mydaus montanus Moulton, 1921:143. Type locality "Mt. Murud, Sarawak."
Mydaus luciferoides Lönnberg and Mjöberg, 1925:509. Type locality "open forest country round Pah Trap and Mein in the Kalabit country" Borneo.

CONTEXT AND CONTENT. Context as above. Three subspecies are recognized (Strien 1986):

M. j. javanensis (Desmarest, 1820:187), see above (*meliceps* Cuvier is a synonym).
M. j. lucifer Thomas, 1902:442, see above (*luciferoides* Lönnberg and Mjöberg and *montanus* Moulton are synonyms).
M. j. ollula Thomas, 1902:443, see above.

DIAGNOSIS. *Mydaus javanensis* can be distinguished from *M. marchei* by its larger size (length of head and body, 375–510 mm; body mass, 1.4–3.6 kg), larger ears, longer tail (50–75 mm), and smaller teeth (Long and Killingley 1983). Color of *M. javanensis* is blackish, whereas *M. marchei* has brown to black upperparts and brown underparts (Long and Killingley 1983). *M. javanensis* also has a white crown and a complete or partial, narrow, dorsal, white stripe extending to tail, whereas *M. marchei* has a scattering of white or silvery hairs on dorsum and sometimes on head (Davis 1961; Long and Killingley 1983).

GENERAL CHARACTERS. *Mydaus javanensis* (Fig. 1) is a small, heavy-bodied animal with an elongated snout, pointed face, and short tail (Davis 1961; Nowak 1999). Fur is thick and coarse, thinner on sides and underparts. Pelage is black to brownish black (Lönnberg and Mjöberg 1925). Dorsal stripe is variable among individuals: it typically runs from head to tail in juveniles but may be interrupted in adults (Jentink 1895). Tail is entirely white; hairs are ca. 4 cm in length, with a blackish ring around the base (Lönnberg and Mjöberg 1925). Dorsal hairs are 3–4 cm in length (Lönnberg and Mjöberg 1925). Snout is piglike and sparsely hairy. Claws are pale; those of forefeet are ca. 2–2.5 cm in length (Lönnberg and Mjöberg 1925).

Measurement ranges (in mm) of 4 specimens (from Borneo) are: total length, 370–520; length of tail, 34–38; length of hind foot, 64–70 (Payne and Francis 1985). Measurements (in mm) of an adult female and a subadult male, respectively, from Sandakan, Borneo, are: total length, 434, 370; length of tail, 38, 34; length of hind foot, 70, 68 (Davis 1961). One male and 1 female from North Borneo measured (in mm), respectively: total length, 464, 472; length of tail, 34, 38; length of hind foot, 68, 70 (Long and Killingley 1983). In Java, *M. javanensis* reportedly measures 375–510 mm in total length, with a tail 50–75 mm in length (Nowak 1999). Body mass is 1,275–3,600 g (Davis 1961; Nowak 1999).

Skull (Fig. 2) is smoothly rounded with a large braincase. Muzzle is short and conical, and supraorbital projections are small (Thomas 1902). Coronoid process is recurved; rostrum is elongated (Long and Killingley 1983). Only skulls of males have sagittal crests (Lönnberg and Mjöberg 1925). Skull measurements (in mm) for 2 males and 2 females, respectively, are: greatest length of skull, 100, 104, 84, 88; condylobasal length, 96, 101, 82, 84; zygomatic breadth, 48, 49, 42, 43; mastoid breadth, 45, 45, 39, 41; breadth of braincase, 34, 35, 34, 35; and length of palate, 54, 55, 43, 44 (Lönnberg and Mjöberg 1925). Measurements (in mm) of skulls of an adult female and a subadult male from Sandakan, respectively, are: total length, 90, 86; condylobasal length, 87, –; zygomatic breadth, 43, 42; palatal length, 47, 46; upper toothrow, 24, 23.5 (Davis 1961). Measurements (in mm) from 1 skull from Java and 1 from Borneo (sexes unknown), respectively, are: greatest length of skull, 92, 84; greatest width, 44, 42; length of bony palate, 47, 42; and maxillary length, 58, 54 (Jentink 1895). Measurements (in mm) of an adult female skull from Borneo are: greatest skull length, 90.1; palatal length, 47.1; zygomatic breadth, 43.0; interorbital breadth, 21.8; and length of maxillary toothrow, 22.3 (Long and Killingley 1983).

DISTRIBUTION. *Mydaus javanensis* occurs in Java, Sumatra, Borneo, and the North Natuna Islands (Fig. 3). No records exist from central or east Kalimantan (Medway 1977). No fossils are known.

FORM AND FUNCTION. Dental formula is i 3/3, c 1/1, p 3/4, m 1/1, total 34 (Lawrence 1939). Indonesian stink badgers have 6 mammae: 2 inguinal and 4 pectoral (Long and Killingley 1983).

REPRODUCTION. Litter size is usually 2–3 (Wood 1865). Litters are probably reared in a burrow (Long and Killingley 1983).

FIG. 1. Adult *Mydaus javanensis* (sex unknown) from Sabah, Malaysia. Used with permission of the photographer C. Prudente.

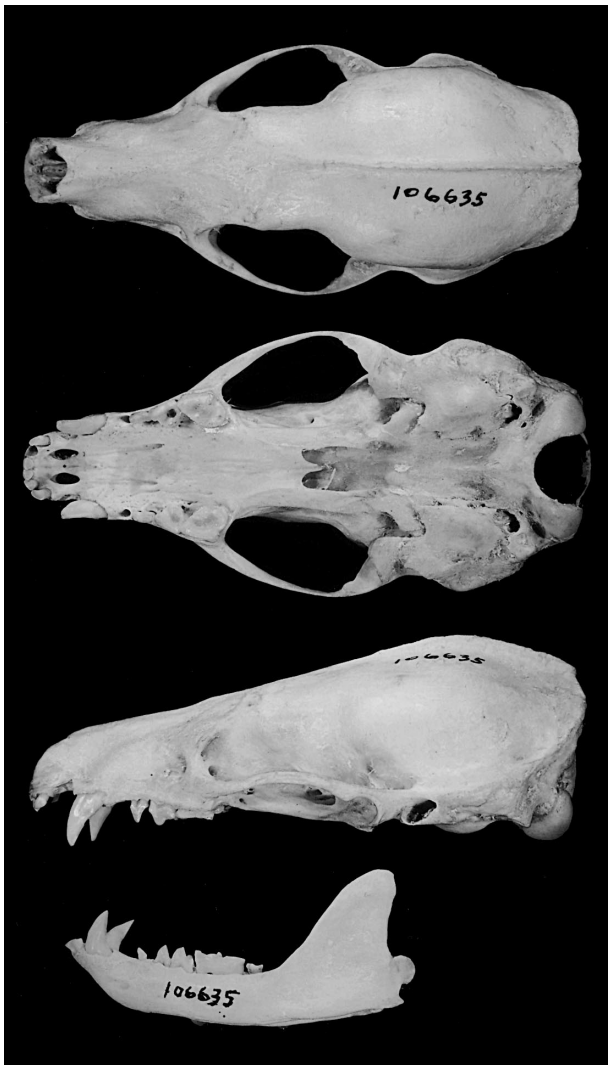

FIG. 2. Dorsal, ventral, and lateral views of cranium and lateral view of mandible of *Mydaus javanensis* (male, American Museum of Natural History 106635). Greatest length of cranium is 96.6 mm.

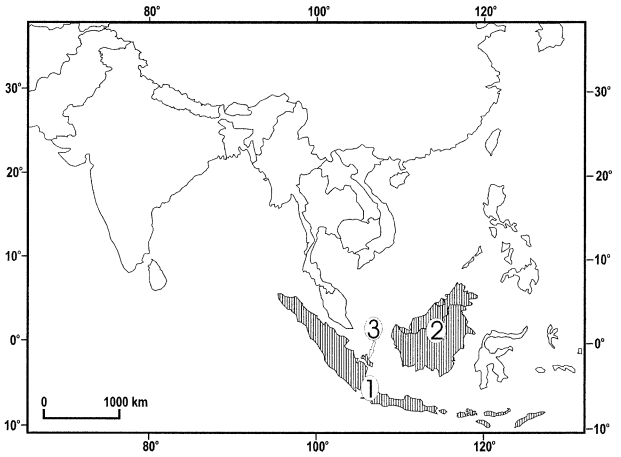

FIG. 3. Distribution of *Mydaus javanensis*, modified from Long and Killingley (1983): 1, *M. j. javanensis*; 2, *M. j. lucifer*; 3, *M. j. ollula*.

ECOLOGY. The Indonesian stink badger occurs in secondary forests and open grounds such as gardens adjacent to forests (Payne and Francis 1985). The species often inhabits elevations >2,000 m (Jentink 1895; Lawrence 1939; Neal 1986) and is seldom, if ever, found on the plains (Jentink 1895). However, individuals may occur at lower elevations: on the Kelabit Plateau in Sarawak, Malaysia, they have been found at altitudes <1,000 m (Davis 1958, 1961), and in West Java, *M. javanensis* occurs at altitudes as low as 250 m (Forbes 1879). In Borneo, the stink badger is believed to inhabit caves at high elevation (Forbes 1879; Long and Killingley 1983; Moulton 1921). In Pah Trap Pamour and Mein in the Kelabit Plateau, stink badgers live in burrows in the open forest (Lönnberg and Mjöberg 1925).

Mydaus javanensis is an omnivore, consuming bird eggs, carrion, insects, worms, and plants (Long and Killingley 1983; Neal and Cheeseman 1996; Payne and Francis 1985). One animal killed in old logged forest had a stomach full of large earthworms (Annelidae—Davis 1961).

Native civets (*Viverra tangalunga* and *Viverricula indica*) and feral cats (*Felis silvestris*) may kill Indonesian stink badgers (Long and Killingley 1983). External parasites, *Haemaphysalis hystricus*, *Haemaphysalis koningsbergeri*, and *Ixodes spinacoxalis*, may occur (Long and Killingley 1983).

In Java, the anal gland secretion is diluted and made into perfume (Long and Killingley 1983). Some natives eat the flesh of *M. javanensis*, removing the scent glands immediately after the animal is killed (Nowak 1999). Shavings of the skin mixed with water may be consumed as a cure for fever or rheumatism (Nowak 1999).

BEHAVIOR. The Indonesian stink badger is active year-round and is nocturnal. During the day, it shelters in underground burrows dug either by itself or by porcupines (*Hystrix javanicum*). Burrows typically are <60 cm deep. Indonesian stink badgers may share their burrows with porcupines (Long and Killingley 1983).

When foraging, *M. javanensis* uses its snout for rooting in the soil in search of worms and insects (Davis 1961). Indonesian stink badgers also use their muzzle and long claws when digging into soft soil (Payne and Francis 1985). They can cause some damage in plantations by digging up seedlings (Long and Killingley 1983), and in West Java they have been killed as pests (Forbes 1879).

The Indonesian stink badger may growl and bite when handled (Long and Killingley 1983). Anal scent glands are used exclusively for defense. When threatened, the Indonesian stink badger raises its tail and can eject its anal secretion up to 15 cm (Banks 1931). The fluid may temporarily asphyxiate or cause blindness if received in the eyes (Nowak 1999).

CONSERVATION STATUS. Indonesian stink badgers are not listed in the 2000 IUCN Red List of Threatened Species.

GENETICS. The genus *Mydaus* was originally placed with the Mustelidae (Wozencraft 1993) based on morphological and fossil evidence (Long 1978, 1981; Petter 1971; Pocock 1921). However, numerous authors placed stink badgers close to skunks (Radinsky 1973; Schmidt-Kittler 1981). Recent genetic analyses suggested that *Mydaus* should be placed with the skunks (genera *Conepatus*, *Mephitis*, *Spilogale*) in a separate family, the Mephitidae (Dragoo and Honeycutt 1997).

REMARKS. The etymological origin of *Mydaus* is the Greek *myda* meaning wet, damp, and moldy and the Greek *us* meaning substance (Borror 1960), undoubtedly referring to the smell of stink badgers. The specific name *javanensis* refers to the origin, Isles of Java. Other vernacular names include Borneo, Javan, or Malay stink badger. Indigenous common names for *M. javanensis* include teledu, teledoe, seng-goeng, and teleggo (Corbet and Hill 1992; Jentink 1895).

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