Mammals of Mt. Pulag National Park



Macaca fascicularis Long-tailed macaque



Cervus mariannus Philippine brown deer



Paradoxurus hermaphroditus Common palm civet



Crateromys schadenbergi Luzon bushy-tailed cloud rat



Apomys musculus Least Philippine forest mouse



Chrotomys silaceus Silver earth-mouse



Crocidura grayi Luzon shrew





Chrotomys whiteheadi Cordillera chrotomys



Sus philippensis

Philippine warty pig (male and female)

Luzon batomys



Rhynchomys soricoides Cordillera rhynchomys



Phloeomys pallidus Northern Luzon giant cloud rat



Archboldomys kalinga Cordillera shrew-mouse

Otopteropus cartilagonodus Luzon pygmy fruit bat

Pipistrellus tenuis

Least pipistrelle

Musseromys sp.

Cordillera gulantang



Ptenochirus jagori Greater musky fruit bat



Hipposideros diadema Diadem roundleaf bat



Carpomys melanurus Greater dwarf cloud rat





Harpiocephalus harpia Hairy-winged bat

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Apomys datae

THE MAMMALS OF MT. PULAG NATIONAL PARK, BENGUET PROVINCE, LUZON

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As the highest point on Luzon Island, and second in height within the Philippines, Mt. Pulag (2930 m) holds a special place in the minds of those people interested in nature, the environment, outdoor recreation, and watershed protection. Mt. Pulag National Park has, therefore, both a unique opportunity (due to the attention it attracts) and obligation (due to its unique aspects) to protect its environment for the enjoyment and appreciation by future generations. This guide is intended to increase the appreciation of all visitors to the park for the natural diversity and unique ecology of the animals that are present. It is based on a biological survey conducted March-April 2008 by the Philippine Mammal Project, based at the Field Museum of Natural History (Chicago), with funding from the Negaunee Foundation and Brown Fund for Mammal Research, and with permission and support from the DENR. Special thanks to PAMB-Mt. Pulag, PAWB-DENR, PAWCZMS-CAR, and NCIP-CAR. For more details on these and other Philippine mammals, go to http://fieldmuseum.org/explore/synopsis-philippine-mammals

The large mammals that live within the park include the Philippine warty pig (*Sus philippinensis*) and Philippine brown deer (*Cervus mariannus*). Pigs have been heavily hunted and are scarce in the park, though the places where they use their sharp tusks to dig for food can be seen occasionally on the forest floor. Brown deer are hunted also, but they are present at low density throughout much of the park; their harsh bark (similar to that of a large dog) can sometimes be heard at night from the upper campground. The common palm civet (*Paradoxurus hermaphroditus*; 2-3 kg), Malay civet (*Viverra tangalunga*; 3-4 kg), long-tailed macaques (*Macaca fascicularis*; 4-6 kg), and northern Luzon giant cloud rat (*Phloeomys pallidus*; 2-3 kg) are present (but uncommon) on the lower slopes of the mountain, up to about 2000 meters elevation. The bushy-tailed cloud rat (*Crateromys schadenbergi*; 1.2-1.5 kg) appears to be common in the upper mossy forest, from about 2600 to 2800 meters; it is one of the most spectacular mammals in the Philippines. Its harsh, gutteral call (a single note, repeated several times in sequence) can sometimes be heard at night from the upper campground, and a lucky hiker might see one up in the trees along the forest trail at night.

Because the park is so high, it is cold and wet, and so there are few species of bats, which love warm weather. The Luzon pygmy bat (*Otopteropus cartilagonodus*; 15-19 g) and least pipistrelle (*Pipistrellus tenuis*; 3.2-4.2 g) are probably the most common species in the park, the former feeding on small fruits and the latter on small insects. On the lower slopes, additional fruit bats (*Cynopterus brachyotis*, 26-45 g; and *Ptenochirus jagori*, 62-97 g) and some insectivorous bats (*Hipposideros diadema*, 33-70 g; and *Harpiocephalus harpia*, 12-23 g) are also likely to be present. Some of the insectivorous bats have elaborate folds of skin around their nostrils that they use to focus the ultrasonic sounds they produce, as a kind of sonar that allows them to "see" in the dark using the echoes from the sounds they produce. Bats provide many essential services to humans; fruit bats carry seeds into areas in need of reforestation, and insect-eating bats consume crop pests that would otherwise cause great damage.

Virtually no native mammals live in either the buildings, vegetable farms, or the high grassland in the park; only nonnative rats live there. Many native small mammals are present in forested portions of the park, nearly all of which live only on Luzon Island, and many only in the Central Cordillera near Mt. Pulag. A sharp-eyed hiker might see a Luzon shrew (Crocidura gravi; 8-10 g) or a Cordillera shrew-mouse (Archboldomys kalinga; 22-31 g) along the trail during the daytime, as they search for insects, earthworms, and other invertebrates in the leaf-litter on the forest floor; they are both small animals, dark brown in color, with small eyes and ears. The Crocidura produce a high-pitched squeak that hikers may hear if they listen closely. Away from the trail in the mossy forest, a person who sits quietly for several minutes might be fortunate enough to see a silver earth-mouse (Chrotomys silaceus; 70-160 g) or Cordillera rhynchomys (Rhynchomys soricoides; 130-225 g) during the daytime. The chrotomys digs actively in the soil while the rhynchomys jumps along using its strong hind legs on trails on the forest floor that it keeps clear of dead leaves; both are searching for earthworms, their favorite food, which are abundant in the rich wet soil of the mossy forest. At dusk or at night, a hiker might see other species: Luzon bullimus (Bullimus luzonicus; 315-520 g) feeds on grass and other plant matter, and Cordillera forest mice (Apomys datae; 70-100 g) feed on earthworms and insects on the forest floor, while Luzon batomys (Batomys granti; 135-225 g), greater dwarf cloud rats (Carpomys melanurus; 165 g), and least Philippine forest mice (Apomys musculus; 19-25 g) feed on tender young leaves, fruit and seeds in the forest canopy. Also in the treetops is the Cordillera gulantang (Musseromys sp. 18-22 g), a species discovered so recently that it has not yet been formally described scientifically. This tiny relative of the giant cloud rats probably feeds on seeds with hard shells, using its tiny but sharp teeth and strong jaw muscles to chew through the tough outer coating to reach the nutritious seed inside. At lower elevations in the park, additional small mammals live, including the beautiful Cordillera chrotomys (Chrotomys whiteheadi; 105-190 g), the common forest rat (Rattus everetti; 170-490 g), and several additional species of forest mice (Apomys).