

## The amphibious murines of New Guinea (Rodentia, Muridae): the generic status of *Baiyankamys* and description of a new species of *Hydromys*

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### Abstract

The amphibious murine rodents of New Guinea have traditionally been classified in three genera: *Hydromys* E. Geoffroy, 1804, *Parahydromys* Poche, 1906, and *Crossomys* Thomas, 1907. Species currently classified in *Hydromys* can be further divided into two cladistic groups: species distributed in lowland habitats (below 2000 m) with glossy, dark brown dorsal pelage, and species restricted to upper montane rivers and lakes (generally above 2000 m) with soft, silvery grey dorsal pelage. These two groups differ not only in pelage traits and habitat association but also in cranio-dental and phallic anatomy. The generic-level name *Baiyankamys* Hinton, 1943, is resurrected for the latter cluster (which includes two species, *B. shawmayeri* of eastern New Guinea and *B. habbema* of west-central New Guinea). Additionally, a new species of *Hydromys* (*H. ziegleri* n. sp.) is described from the southern foothills of the Prince Alexander Range of Papua New Guinea. Mammalian zoogeography in the North Coast Ranges, an area of considerable geographically-restricted mammalian endemism, is reviewed.

**Key words:** *Hydromys*, *Baiyankamys*, New Guinea, taxonomy, North Coast Ranges, amphibious rat

### Introduction

The murine tribe Hydromyini comprises the amphibious “water-rats” and the terrestrial “moss-mice” of the Australo-Papuan region, a group of species currently classified in 10 genera (Ellerman 1941; Menzies and Dennis 1979; Flannery 1995), with greatest diversity in the mid-montane forests along the Central Dividing Ranges of New Guinea (Flannery 1995). In each of these genera the cranium is dorsally constricted behind (rather than between) the orbits, the occlusal patterns of the molars are simplified or obliterated, and the third upper and lower molars are absent or grossly reduced—a combination of charac-