= Oryzomys dimidiatus =

Oryzomys dimidiatus , also known as the Nicaraguan oryzomys , Thomas 's rice rat , or Nicaraguan rice rat , is a rodent in the genus Oryzomys of the family Cricetidae . It is known from only three specimens , all collected in southeastern Nicaragua since 1904 . Placed in Nectomys upon its discovery , it was later classified in its own subgenus of Oryzomys and finally recognized as closely related to other species now placed in Oryzomys , including the marsh rice rat and Oryzomys couesi , which occurs in the same region .

With a head and body length of 110 to 128 mm (4 @.@ 3 to 5 @.@ 0 in) , Oryzomys dimidiatus is a medium @-@ sized rice rat . The upperparts are gray @-@ brown and the underparts are grayish , not buffy as in O. couesi . The tail is only slightly darker above than below . All three specimens were caught near water and the species may be semiaquatic , spending some time in the water . Its conservation status is currently assessed as " Least Concern " .

= = Taxonomy = =

The first known specimen was obtained by W.G. Palmer in 1904 and the next year , Oldfield Thomas of the British Museum of Natural History described this animal as the holotype of a new species he named Nectomys dimidiatus . He placed it in the genus Nectomys , commenting that it was much smaller than but otherwise similar to previously known members of that genus . The species was listed as a Nectomys in taxonomic overviews in the next decades , including a 1944 review of the genus by Philip Hershkovitz .

After examining the holotype in London , Hershkovitz instead placed the species in the genus Oryzomys in 1948 . He remarked that it was an especially distinctive member of that genus , and hence classified it in its own subgenus Micronectomys . J. Hernández @-@ Camacho described a second species of Micronectomys , Oryzomys (Micronectomys) borreroi , from Colombia in 1957 . In 1970 , Hershkovitz treated O. dimidiatus in another publication and conceded that his name Micronectomys was a nomen nudum (" naked name ") because he had not explicitly mentioned characters differentiating it from other taxa in his 1948 publication . Nevertheless , he did not do anything to rectify the situation , and Micronectomys remains a nomen nudum . Hershkovitz also noted that while O. dimidiatus resembles a juvenile Nectomys in external anatomy , it is otherwise similar to the marsh rice rat (Oryzomys palustris) . He accepted O. borreroi as an Oryzomys , but did not think it closely related to O. dimidiatus . Six years later , Alfred Gardner and James Patton instead suggested that O. borreroi was a Zygodontomys , and in his 1991 review of that genus Robert Voss confirmed that it is the same as Zygodontomys brunneus .

A second specimen was obtained in 1966 and the find was published in 1971 by Hugh Genoways and Knox Jones , who noted that the species is closely similar to O. palustris . Later workers affirmed the relationship between O. dimidiatus , O. palustris and associated species like O. couesi . Fiona Reid reported in 1997 that a third specimen had been found . In 2006 , Marcelo Weksler and coworkers removed most of the species formerly placed in Oryzomys from the genus , because they are not closely related to the type species O. palustris , but kept O. dimidiatus as an Oryzomys .

Oryzomys dimidiatus is now recognized as one of eight species in the genus Oryzomys . O. dimidiatus is further part of the O. couesi section , which is centered on the widespread Central American O. couesi and also includes six other species with more limited and peripheral distributions . O. couesi occurs with O. dimidiatus in southeastern Nicaragua . Many aspects of the systematics of the O. couesi section remain unclear and it is likely that the current classification underestimates the true diversity of the group . Oryzomys is classified in the tribe Oryzomyini (" rice rats ") , a diverse assemblage of American rodents of over a hundred species , and on higher taxonomic levels in the subfamily Sigmodontinae of family Cricetidae , along with hundreds of other species of mainly small rodents .

= = Description = =

Oryzomys dimidiatus is a medium @-@ sized rice rat , smaller than O. couesi , with thick , glossy fur and velvety underfur . The hairs on the back are about 6 mm in length . The upperparts are gray @-@ brown with some dark hairs , appearing darker overall than in O. couesi ; the color becomes more yellowish towards the sides . According to Thomas , a faint buff line extends from the sides to the inner sides of the hindlegs . The underparts are grayish , contrasting with the buffy underparts of O. couesi . The snout is short and the well @-@ haired ears are partly hidden by the fur . The hands and feet are off @-@ white or brownish above , not white as in O. couesi . The hindfeet show small interdigital webs , but they lack long tufts of hair on the digits and some of the pads are reduced or absent . The tail is about as long as the head and body and contains about 15 rings per centimeter . It is slightly darker (grayish) above than below (whitish) , but the difference in color is much less pronounced than in O. couesi .

Compared to that of Nectomys , the skull is lightly built and has narrow nasals and a broad , round braincase without conspicuous ridges on it . The zygomatic plate is broad . The incisive foramina (perforations of the front part of the palate) extend between the first molars and are broadest in their back halves . The broad mesopterygoid fossa , the gap behind the end of the palate , is perforated by sphenopalatine vacuities . The molar crowns are not as simplified as in Nectomys species , but the front cusps of the upper (anterocone) and lower first molar (anteroconid) are not divided in two . In addition to the main roots , the upper and lower first molars have smaller additional roots .

Measurements for the first two known examples are as follows (in each case , the first measurement given is from the holotype , taken in 1904 , the second , from the specimen taken in 1966) : head and body length 125 and 118 mm (4 @.@ 9 and 4 @.@ 6 in) , tail length 115 and 110 mm (4 @.@ 5 and 4 @.@ 3 in) , hindfoot length 27 and 28 mm (1 @.@ 1 and 1 @.@ 1 in) , ear length 13 and 15 mm (0 @.@ 51 and 0 @.@ 59 in) , skull length 29 @.@ 8 and 29 @.@ 0 mm (1 @.@ 17 and 1 @.@ 14 in) . The 1966 specimen weighed 46 @.@ 0 g (1 @.@ 62 oz) and had testes 11 mm (0 @.@ 43 in) long ; these measurements were not recorded in the 1904 specimen . Reid , who mentioned the third specimen , reported a maximum head and body length of 128 mm (5 @.@ 0 in) , tail length of 150 mm (5 @.@ 9 in) , hindfoot length of 31 mm (1 @.@ 2 in) , and ear length of 19 mm (0 @.@ 75 in) .

= = Distribution , ecology , and behavior = =

Oryzomys dimidiatus is known from three specimens collected in the lowlands of the South Caribbean Coast Autonomous Region in southeastern Nicaragua . The first , an old male , was collected on November 5 , 1904 , in a banana plantation with very moist red clay on the Río Escondido near El Rama . The second , a young adult male , was caught on July 26 , 1966 , in dense cane on the south bank of the Río Mico at El Recreo , 15 km (9 mi) west from the location of the first specimen , along with three other rice rats (O. couesi , Melanomys caliginosus , and Oligoryzomys fulvescens) , the cotton rat Sigmodon hirsutus , and the cottontail rabbit Sylvilagus brasiliensis . The third was caught at a stream near Bluefields . Reid suggested that the species is semiaquatic , spending some time in the water , like other Oryzomys .

= = Conservation status = =

The 2009 IUCN Red List assessed the conservation status of Oryzomys dimidiatus as " Least Concern " , noting that its distribution may be larger than currently known . Its population is presumed to be large and no threats to its habitat are known .