

= *Oryzomys albiventer* =

Oryzomys albiventer is a rodent in the genus *Oryzomys* of family Cricetidae from interior western Mexico , in the states of Jalisco , Guanajuato , and Michoacán . First described in 1901 as a separate species , it was later lumped under *O. couesi* and the marsh rice rat (*O. palustris*) until it was reinstated as a species in 2009 . It differs from neighboring *Oryzomys* populations in size and measurements and is a large , brightly colored species with a long tail and robust skull and molars . Its range has been much impacted by agricultural development , but isolated populations are thought to persist .

= = Taxonomy = =

Oryzomys albiventer was first described by C.H. Merriam in 1901 on the basis of ten specimens from Ameca , Jalisco . He named the animal albiventer after the white color of its underparts and considered it most closely related to *Oryzomys aquaticus* (currently included in *Oryzomys couesi*) . Two years later , D.G. Eliot described *Oryzomys molestus* on the basis of a single individual from Ocotlán , Jalisco ; the name molestus means " troublesome , irksome " . Eliot considered *Oryzomys fulgens* , another current synonym of *O. couesi* , as the closest relative of his new species . In his 1918 review of North American *Oryzomys* , E.A. Goldman assessed the holotype of *O. molestus* , an old male , as merely a large example of albiventer , and reduced albiventer to one of many subspecies of *O. couesi* . He considered it closely related to three other highland Mexican forms . In 1960 , E.R. Hall argued that *O. couesi* was the same species as the marsh rice rat (*O. palustris*) of the United States , and listed albiventer as a subspecies of the latter . Later , *O. couesi* was again accepted as separate from the marsh rice rat , but *O. albiventer* was still classified under *O. couesi* .

In a 2009 revision of the *Oryzomys* of western Mexico , M.D. Carleton and J. Arroyo @-@ Cabrales noted substantial differences in coloration and measurements between highland populations (albiventer) and lowland populations (mexicanus) in Jalisco . On the basis of these differences , they recognized *O. albiventer* as a species separate from the lowland populations , which they classified under *O. couesi* . They confirmed that Eliot 's molestus was based on a large example of *O. albiventer* , but left the status of the three forms Goldman had associated with albiventer ? crinitus , aztecus , and regillus ? open , noting that there was no convincing evidence that these represented the same species as *O. albiventer* . The identity and exact provenance of fulgens (supposed to be from the Valley of Mexico) , and consequently its relationship to *O. albiventer* , remain unknown .

O. albiventer is part of the genus *Oryzomys* , which currently includes about eight species distributed from the eastern United States (*O. palustris*) into northwestern South America (*O. gorgasi*) . *O. albiventer* is further part of the *O. couesi* section , which is centered on the widespread Central American *O. couesi* and also includes various other species with more limited and peripheral distributions . 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* previously included many other species , which were progressively removed in various studies culminating in a contribution by Marcelo Weksler and coworkers in 2006 that removed more than forty species from the genus . All are 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 .

In 1904 , Eliot used the common name " white @-@ bellied rice rat " for *O. albiventer* and " Ocotlan rice rat " for *O. molestus* . In 1918 , Goldman also used " white @-@ bellied rice rat " for *O. albiventer* .

= = Description = =

Oryzomys albiventer is a large and long @-@ tailed *Oryzomys* . The upperparts are brightly ochraceous , becoming grayer toward the front . The hairs on the underparts are pale gray near the

bases and white in the outer half , so that the underparts appear pale grayish according to Carleton and Arroyo @-@ Cabrales (not white as claimed by Merriman) . The tail is dark above and light below . The skull and molars are relatively robust . *O. albiventer* has broad zygomatic arches (cheekbones) , long incisive foramina (perforations of the palate between the incisors and the molars) , and long nasal bones that extend behind the premaxillary bones . Compared to its lowland relative *O. couesi mexicanus* , *O. albiventer* is larger and more brightly colored and has larger molars but narrower incisive foramina .

In twelve specimens , total length is 245 to 314 mm (9 @.@ 6 to 12 @.@ 4 in) , averaging 285 @.@ 4 mm (11 @.@ 24 in) ; head and body length is 116 to 142 mm (4 @.@ 6 to 5 @.@ 6 in) , averaging 130 @.@ 0 mm (5 @.@ 12 in) ; tail length is 129 to 173 mm (5 @.@ 1 to 6 @.@ 8 in) , averaging 155 @.@ 4 mm (6 @.@ 12 in) ; hindfoot length is 33 to 40 mm (1 @.@ 3 to 1 @.@ 6 in) , averaging 36 @.@ 1 mm (1 @.@ 42 in) ; and skull length (occipitonasal length) is 30 @.@ 0 to 34 @.@ 5 mm (1 @.@ 18 to 1 @.@ 36 in) , averaging 32 @.@ 9 mm (1 @.@ 30 in) .

= = Distribution and conservation = =

O. albiventer occurs at about 1 @,@ 200 to 1 @,@ 800 m (3 @,@ 900 to 5 @,@ 900 ft) elevation in northern Michoacán , southern Guanajuato , and central and eastern Jalisco , mostly in the area around Lake Chapala . Its range has seen massive agricultural development and although populations may survive , the current distribution of the species is certainly highly fragmented . More survey work is needed to assess the distribution and status of *O. albiventer* .