

Nectomys palmipes (Trinidad Water Rat)

Family: Cricetidae (Voles and New World Mice)

Order: Rodentia (Rodents)

Class: Mammalia (Mammals)



Fig. 1. Trinidad water rat, *Nectomys palmipes*.

[http://america.pink/nectomys-palmipes_3185925.html, downloaded 30 April 2016]

TRAITS. *Nectomys* is a genus of neotropical water rats which contains many different species which includes *N. palmipes*, the Trinidad water rat. *Nectomys palmipes* is a little bigger than *N. melanius* but smaller than *N. squamipes*. The pelage (fur) of this species is shorter when compared to *N. melanius* and the coat is also not as glossy. Its colour is lighter compared to most species of its genus, being cinnamon brown in colour (Fig. 1) whereas the underside (the belly and chest area) is almost white or a light brown (Fig. 2). The tail is about the same length as the body (Hershkovitz, 1944). As in all *Nectomys* species, the hind feet of *N. palmipes* are webbed to some extent along with being big and powerful, with about five tubercles (bumps). These rats possess primitive and unspecialised cheek teeth according to the Animal Diversity Web (Okihiro, 2011). The mean mass of these animals is approximately 0.29kg (PNAS, 2016).

DISTRIBUTION. *Nectomys palmipes* can be found on the island of Trinidad as well as in some areas in northeastern Venezuela (Patton et al., 2015) (Fig. 3).

HABITAT AND ACTIVITY. *Nectomys palmipes* are always found residing near water in tropical rainforests where there is dense greenery such as tall, thick grasses and forest, as well as a lot of rainfall, and this is because of their semiaquatic nature. This species possesses the ability to adapt and be tolerant of secondary habitats such as agricultural areas. *N. palmipes* are nocturnal animals, active in the night (Ochoa et al., 2008).

FOOD AND FEEDING. The Trinidad water rat is an omnivorous animal as it feeds on plants and fruits, fungi, and animals such as invertebrates (crabs, insects) and small vertebrates (Earnest, 1986). They spend quite an amount of time foraging in their aquatic habitats as well as on land.

POPULATION ECOLOGY. These rats are solitary and territorial animals and according to the IUCN, the individual home range is 0.3-1.6 ha. Although the population trend for this species is unknown, it is known to be common. Nests are made under logs, tangles of roots or in vegetation and these nests are not connected to any form of water (Hershkovitz, 1944). The generation length is 0.46 years, and the estimated dispersal rate is 2.43km/year (PNAS, 2016). Additionally, this species is seen to have two subspecies, one existing in Trinidad (*N. p. palmipes*) while the other exists in Venezuela (*N. p. tatei*), distinguished by different chromosome numbers, the former being $2n=17$ and the latter, $2n=16$, which is a lot less than other species in the genus *Nectomys* (Patton et al., 2015).

REPRODUCTION. Little is known about the reproduction of this species that is, mating season as well as a standard or average litter. However, it was recorded that one *N. palmipes* had three embryos and two captive females produced litters of two and three respectively (Earnest, 1986).

APPLIED ECOLOGY. *Nectomys palmipes* is listed as of Least Concern list by the IUCN and this is because the population is not under any environmental stresses nor is it being threatened in any way so therefore the population is expected to not decline. Also, there is a wide distribution of the species and it can be found in a few protected areas (Ochoa et al., 2008).

REFERENCES

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Fig. 2. Paler belly fur of *Nectomys palmipes*.

[http://america.pink/nectomys-palmipes_3185925.html, downloaded 11 March 2016]



Fig. 3. Distribution of *Nectomys palmipes*.

[<http://maps.iucnredlist.org/map.html?id=14473>, downloaded 14 March 2016]