

Dasyprocta ruatanica.

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***Dasyprocta* Illiger, 1811**

- Mus* Linnaeus, 1766:79. Part.
- Cavia*: Erxleben, 1777:353. Part, not *Cavia* Pallas, 1766:30.
- Agouti*: Lacépède, 1802:78. Part, not *Agouti* Lacépède, 1799:9.
- Dasyprocta* Illiger, 1811:93. Type species *Mus agouti* Linnaeus, 1766, by subsequent designation (Thomas 1903).
- Cloromis* F. Cuvier, 1812:290. Type not given.
- Chloromys* Rafinesque, 1815:56. Incorrect subsequent spelling of *Cloromis* F. Cuvier, 1812:290.
- Dasyporca* Gray, 1825:341. Incorrect subsequent spelling of *Dasyprocta* Illiger, 1811:93.
- Dasyprocta* Lund, 1840:191. Incorrect subsequent spelling of *Dasyprocta* Illiger, 1811:93.
- Mamdasyproctanus* Herrera, 1899:29. Unjustified emendation of *Dasyprocta* Illiger, 1811:93 (Palmer 1904:25).

CONTEXT AND CONTENT. Order Rodentia, suborder Hystricognathi, family Dasyproctidae. The genus *Dasyprocta* includes 11 extant species (Woods 1993), with some disagreement (Emmons 1997; Hall 1981; Woods 1993). A key to the *Dasyprocta* modified from Eisenberg (1989), Emmons (1997), Hall (1981), and Woods (1993) is given below.

- 1. Distribution limited to Central American islands 2
- Distribution not limited to Central American islands 3
- 2. Distribution limited to Roatán Island, Honduras
.....*D. ruatanica*
- Distribution limited to Coiba Island, Panama *D. coibae*
- 3. Midbody and flanks washed in orange *D. azarae*
- Midbody and flanks not washed in orange 4
- 4. Body mostly black 5
- Body mostly not black 6
- 5. Hair on rump with white tips or frosted *D. mexicana*
- Hair on rump with black tips and not frosted *D. fuliginosa*
- 6. Rump dark red to orange 7
- Rump not dark red or orange 8
- 7. Distributed widely in Lesser Antilles and South America,
excluding the Guianas *D. leporina*
- Distribution limited to the Guianas *D. cristata*
- 8. Reddish flanks with contrasting black rump patch
.....*D. prymnolopha*
- Reddish flanks without contrasting black rump patch 9
- 9. Body brown with agouti-colored pelage (sometimes vari-
able). Widely distributed in Central and South America
..... *D. punctata*
- As above, but with limited distribution in South America
..... 10
- 10. Distribution limited to Orinoco Delta (Venezuela)
.....*D. guamara*
- Distribution limited to the San Ana Valley of southeastern
Peru *D. kalinowskii*

***Dasyprocta ruatanica* Thomas, 1901**

Roatán Island Agouti

Dasyprocta ruatanica, Thomas, 1901:272. Type locality “Ruatan Island, Bay Islands of Honduras.”

CONTEXT AND CONTENT. Context as for genus. *D. ruatanica* is monotypic.

DIAGNOSIS. *Dasyprocta ruatanica* (Fig. 1) is smaller in size than *D. punctata* (Goodwin 1942; Hall 1981; Reid 1997). Color of *D. ruatanica* is richer and more strongly fulvous anteriorly

and yellow posteriorly than *D. punctata*. The anterior back of *D. ruatanica* is more ochraceous and the posterior back is more yellow than *D. punctata* (Thomas 1901). Ventral surface of *D. ruatanica* is more olivaceous than *D. punctata*. However, these differences in color are slight (Thomas 1901). Ears of *D. punctata* are naked, whereas ears of *D. ruatanica* have a few blackish hairs (Reid 1997; Thomas 1901). Skull of *D. ruatanica* (Fig. 2) is shaped similarly to that of *D. punctata*, but conspicuously smaller in all dimensions (Thomas 1901).

GENERAL CHARACTERS. Fur of *D. ruatanica* is uniformly orange brown and grizzled to the root with black (Reid 1997; Thomas 1901). Annulations are conspicuous on dorsum and less so on rump (Thomas 1901). Ventral surface is like the back, but more olivaceous (Thomas 1901). A white spot is present on the chin and a yellow patch on the middle of the posterior part of the belly (Thomas 1901). Limbs are same color as the body proximally and darken distally so that forefeet and hind feet are deep grizzled brown (Thomas 1901). Dimensions of the adult female type specimen (in mm) are: length of head and body, 435; length of hind foot, 101, greatest length of skull, 96.5; basilar length, 70.5; zygomatic breadth, 46; nasal length, 36; nasal breadth, 18.7; interorbital breadth, 27.5; diastema length 22; diagonal length of bulla, 15; and length of upper toothrow, 17.4 (Goodwin 1942; Thomas 1901).

DISTRIBUTION. *Dasyprocta ruatanica* is endemic to Roatán Island or Isla de Roatán, Honduras (Fig. 3; Goodwin 1942; Hall 1981; Lee et al. 2000, Reid 1997; Thomas 1901). No fossils are known.

ECOLOGY. *Dasyprocta ruatanica* is found in brushy, tropical scrub forests. Most of the scrub forests that still exist are on mountains. Much of the habitat on Roatán has been disturbed by the construction of hotels and houses (Lee et al. 2000). A population of *D. ruatanica* occurs on Fantasy Island 30 m off the middle south shore of Roatán Island, Honduras (Lee et al. 2000). Much of Fantasy Island (which is 100 m in diameter) is occupied by a resort hotel and hotel grounds. A small hill on Fantasy Island is covered with several species of trees (*Casuarina equisetifolia*, *Cocos nucifera*, *Pentaclethra*, *Swietenia*, and *Thrinax*) and a patch of bamboo ground cover that *D. ruatanica* use for sleeping. *D. ruatanica* were more common on the tree-covered hill, although they use all of Fantasy Island, including areas under the hotel buildings.



FIG. 1. An adult Roatán Island agouti (*Dasyprocta ruatanica*) from Roatán Island, Honduras. Photographed by T. E. Lee, Jr.



FIG. 2. Dorsal, ventral, and lateral views of cranium and lateral view of mandible of *Dasyprocta ruatanica* (sex unknown) from Roatán Island, Honduras (ACUNHC 633). Greatest length of skull 101.5 mm. Specimen courtesy of the Abilene Christian University Natural History Collection. Used with permission of the photographer, S. Butman.

Dasyprocta ruatanica is sympatric with other vertebrates on Fantasy Island, including *Artibeus jamaicensis*, *A. phaeotis*, *Ctenosaura oedirhina*, *Iguana iguana*, and *Rattus rattus*. Bats and other arboreal frugivores are important to *D. ruatanica* because they drop unripe fruit to the ground that otherwise would not be available (Lee et al. 2000; Smythe et al. 1996).

Dasyprocta ruatanica feeds on a wide variety of plants including almonds (*Terminalia*), coconuts (*Cocos nucifera*), hibiscus flowers, and *Pentaclethra* pods. *D. ruatanica* also fed on rice, oranges, and corn kernels that were the intended food for domestic chickens, turkeys, and peafowl (Lee et al. 2000).

BEHAVIOR. The following behaviors were recorded for *D. ruatanica*: eating, sitting, standing, walking, running, sniffing, lead and following, scratching, digging, grooming, marking, muzzling, and nursing (Lee et al. 2000). *D. ruatanica* spends a large part of its time sitting (23.1%) and feeding (22.0%). *D. ruatanica* picks up flowers, fruits, and nuts (Lee et al. 2000). Looking for food, which also included walking, sniffing, and digging, occupied 29.2% of the time (Lee et al. 2000). *D. ruatanica* will bury seeds for storage. *D. ruatanica* spent a significantly greater amount of time in walking or running than in social or feeding activities (Lee et al. 2000). Social behavior occupies less time than feeding behaviors and includes muzzling among *D. ruatanica*. Muzzling consists of animals approaching each other and rubbing rostrum to rostrum.

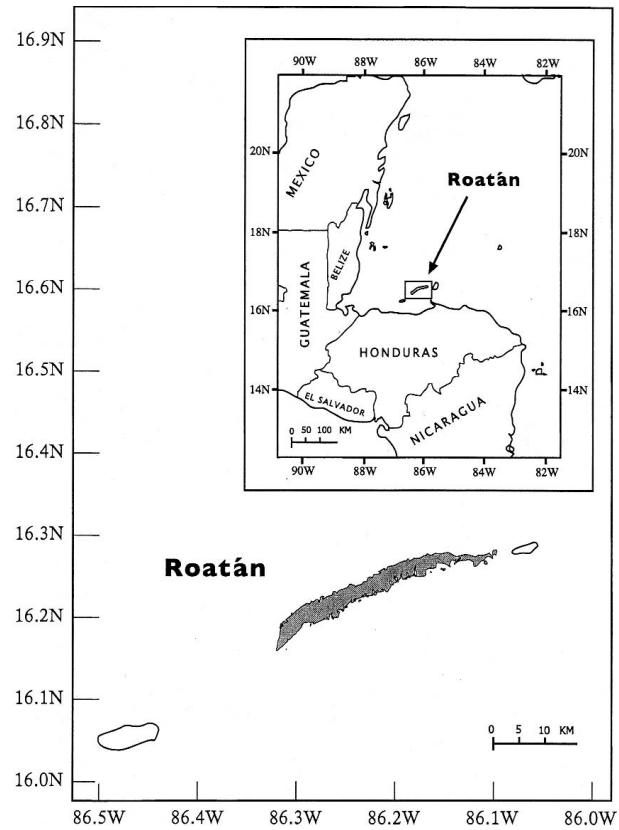


FIG. 3. Geographic distribution of *Dasyprocta ruatanica* based on Goodwin (1942), Hall (1981), Lee et al. (2000), Reid (1997), and Thomas (1901).

D. punctata (Smythe 1983) uses the perineum to mark trails and feeding and sleeping spots. Marking accounted for 2.2% of observation time of *D. ruatanica* (Lee et al. 2000).

Fleeing behavior with rump hairs erected occurs (Lee et al. 2000). Territoriality was not observed (Lee et al. 2000; Smyth et al. 1996). On Roatán Island, *D. ruatanica* is hunted and flees at the sight of humans (Lee et al. 2000).

Three pairs of mothers and juveniles of *D. ruatanica* were observed in lead and following behavior that occupied 12.1% of their time (Lee et al. 2000). The juveniles were ca. two-thirds of the size of the mother and had the same color. Some juveniles tried to nurse, but usually the mother would back away when the juvenile attempted to nurse. On 1 occasion a juvenile rested its front legs and half its body on its mother's shoulders for ca. 20 min (Lee et al. 2000). *D. ruatanica* did not live in or dig holes large enough to live in (Lee et al. 2000; Smythe 1983). *D. ruatanica* is active day and night (Lee et al. 2000).

CONSERVATION STATUS. *Dasyprocta ruatanica* is listed as threatened (Reid 1997; Woods 1993). Fantasy Island has a small population of *D. ruatanica* that may be isolated from Roatán (Lee et al. 2000). Continued alteration of habitat on Roatán may fragment populations of *D. ruatanica* (Lee et al. 2000).

REMARKS. The generic name *Dasyprocta* derives from the Greek and means hairy buttocks (Palmer 1904). The specific name *ruatanica* refers to Roatán Island. The common name of *D. ruatanica* is spelled 2 different ways in the literature: Roatán Island agouti (Lee et al. 2000; Reid 1997) and Ruatan Island agouti (Goodwin 1942; Hall 1981).

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