

Sciurus granatensis (Red-tailed Squirrel)

Family: Sciuridae (Squirrels)

Order: Rodentia (Rodents)

Class: Mammalia (Mammals)



Fig. 1. Red-tailed squirrel, *Sciurus granatensis*

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TRAITS. The red-tailed squirrel is a medium-sized tree squirrel (Nitikman, 1985) with a conspicuous orange-red tail (Fig. 1). Males and females differ slightly in mass as females are larger than males (Heaney and Thorington, 1978). Their body mass is within the range 220 to 520 g (Heaney and Thorington, 1978). The total length of both sexes is 33-52 cm with a tail length of 14-28 cm (Allen, 1902). Fur is short and colour varies. Fur colour is usually reddish brown but some squirrels have darker coloured skin and may be black. Their tail colour is rusty red or orange and some have a black coloured tip. These squirrels have a broad skull with a long rostrum and nasals (Nitikman, 1985).

ECOLOGY. *Sciurus granatensis* is endemic to Trinidad and Tobago. It is also found in Colombia, Costa Rica, Panama and Venezuela. *Sciurus granatensis* is found in habitats ranging from tropical forests to croplands. They are terrestrial animals and are found both on the ground and in trees but are more common in trees. Home ranges of females are larger than those of males at a size of approximately 3 ha compared to 1-2 ha for males (Nitikman, 1985). They feed on apples and other fruits. Their diet also includes hard nuts, twigs, flowers and leaves as well as tree frog eggs. They feed on as many as 58 species of plants (Glanz et al., 1982). Fruits include mangoes, avocados, bananas, guava and coconut. Insect larvae are also fed on occasionally.

SOCIAL ORGANIZATION. *Sciurus granatensis* are solitary animals. They are rarely seen in groups and are social only during breeding seasons. Social behaviour is also exhibited when mothers are with their young. Groups may be observed at feeding aggregations however a large space of several metres is maintained between squirrels. Females socialise with their young when feeding and playing. Adult female home ranges do not overlap and females do not come within 10 m of each other (Nitikman, 1985). If this space is decreased, threats and even fights and attacks may occur. Adult females do not feed in the same location or at the same time. This only occurs if feeding ranges such as trees are very large thus maintaining the acceptable spatial distance. Adult male home ranges however, overlap with those of other males and females. Adult males feed together where food is abundant. They also maintain close distances with each other around females in oestrus (Nitikman, 1985). Young, weaned red-tailed squirrels remain in close proximity to their mother's home range for up to several weeks after which the females move further away than the males. Males are therefore more social than females. *Sciurus granatensis* are social with a few other species. They may be observed in close proximity to some birds and certain species of monkey such as the squirrel monkey (*Saimiri sciureus*). They are however aggressive to many species in close proximity and may avoid such species. They do not socialise with humans and quickly run away if disturbed by them.

ACTIVITY. *Sciurus granatensis* are diurnal organisms. Most of their activity occurs above ground on trees. These include feeding and travelling. They feed approximately 30 metres above ground. Tree trunks and vines are used to travel throughout the forest. They travel by running along tress and vines and leaping from tree to tree (Enders, 1935).

FORAGING BEHAVIOUR. *Sciurus granatensis* are daytime foragers. They forage between sunrise and sunset from approximately 6:30 am to midday. They resume foraging in late afternoon till sunset. (Bonarccorso et al., 1980). They forage by breaking large, decaying tree trunks and vines to reach insect larvae inside. They crack the hard shells of nuts by gnawing through the shell and feed on the inner seed. When fruits are taken from the ground, the squirrel climbs up several metres above the ground to feed. They hold fruit with forepaws and tear off the skin with their incisors by moving their heads up and backwards (Nitikman, 1985).

COMMUNICATION. Vocal communication: *Sciurus granatensis* are generally silent animals. They do have several distinctive calls and communicate vocally. They make short, hoarse notes when frightened or as an alarm of predators. They also have distinct vocal mating calls. These include grunts, chucks and squeals (Fleming, 1970).

Visual communication: *Sciurus granatensis* also communicate by tail gestures. They use their tails as signalling devices to communicate with other squirrels. They do this by tail-flicking. This is also done to ward off predators.

Olfactory communication: *Sciurus granatensis* mark regular routes travelled with urine. This is a method of territory marking as well as to attract mates during breeding season.

SEXUAL BEHAVIOUR. The gestation period of *Sciurus granatensis* lasts less than two months. Females give birth to two or three young. Babies are reared by mothers with no assistance from males. Males start following females around three days before oestrus begins (Heaney and Thorington, 1978). When the female is in oestrus, several males gather in close

proximity to her home range. They follow her continuously during this time. Males chase each other and follow females for hours before mounting occurs. When successful mounting occurs, mating lasts for a short period of less than one minute. After mating males lose interest in females within half hour.

JUVENILE BEHAVIOUR. Young are playful and wrestle with each other and their mother. They hold on to their mother when being transported by hugging her neck with their limbs and curling their tails over her shoulder and back (Lang, 1925). They also stay in close proximity to the maternal home range for several weeks after weaning.

ANTIPREDATOR BEHAVIOUR. Predators are evaded by quick fleeing of the squirrel. Vigorous alarm calls by the squirrel alert others of predators. Tail-flicking is also initiated to warn off predators.

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Fig. 2. Red-tailed squirrel eating a seed.

[<http://www.yournaturephotos.com/.../Red-Tailed-Squirrel-/48/48/.../Yes.html>, Downloaded 20 October 2011]



Fig. 3. Red-tailed squirrel as prey being eaten by a hawk.

[<http://www.istockphoto.com>-, downloaded 20 October 2011]



Fig. 4. A black red-tailed squirrel foraging.

[<http://www.liliannattel.wordpress.com.html>, downloaded 20 October 2011]