Vampyrodes caraccioli (Great Stripe-faced Bat)

Family: Phyllostomidae (Leaf-nosed Bats)
Order: Chiroptera (Bats)
Class: Mammalia (Mammals)

Fig. 1. Great stripe-faced bat, *Vampyrodes caraccioli*.

[http://www.uniprot.org/taxonomy/148041, downloaded 20 February 2016]

TRAITS. The great stripe-faced bat has two prominent white vertical stripes on its face originating from the nose and stopping just behind the ears as seen in Fig. 1. There is also a white stripe running from the head, along the middle of the back to the rear end (Fig. 2). The skull is large and strong, measuring 24.7-28.9mm. It has a relatively large body size weighing 25-47g and 47-59mm in length. The nose has a large leaf-shaped projection. The cup-shaped ears are yellow to pale pink on the inside but light brown on the outer surface. Colour of fur above and below is greyish brown. As seen in Fig. 3, the forearms and legs are covered with hair and there is a membrane between the thighs, called the uropatagium (Willis, 1990). It does not possess an external tail (outside the membrane). There are two upper and lower incisors that have complete cutting edges and two upper and three lower molars with bifid (split) edges.

DISTRIBUTION. This species occurs in large parts of Central and northern South America (Fig. 4), including Trinidad and Tobago (Miller and Reid, 2008; Velazco, 2010).

HABITAT AND ACTIVITY. It is found in different levels of moist tropical forests, plantations and gardens. They roost (hang) at about 7-12m, under shrub branches, subcanopy trees, and palm leaves. Roosting spots may be changed throughout the day. Usually male bachelors roost alone. Being nocturnal, the bat's activity starts 30 minutes after sunset and it is most active for 1-2 hours, and then active again after midnight (Miller and Reid, 2008). This widespread bat is uncommon, but can be locally common. They usually occur in groups of 1-4 adult bats, including one male and 2 or 3 females with their young.

FOOD AND FEEDING. *Vampyrodes caraccioli* eats fruits, mainly bananas. It may also consume pollen and other fruits available (Miller and Reid, 2008). They hang upside down while eating as seen in Fig. 5. From the bats resting area they commute directly to a fruit tree to feed. These feeding areas can be up to 2300m away. Upon reaching a fruit tree the bat hovers in a circling motion to select a fruit. When it collects a fruit the bat does not stay on the fruit tree to eat it but instead takes one fruit at a time, flies less than 100 m away and chooses a location called a feeding roost. After eating it then either searches for another fruit tree or revisits the previous one. Throughout the night the bat can visit two to four fruit trees. According to a study done by Morrison (1980) moonlight is inversely proportional to feeding activity of *Vampyrodes caraccioli*. On nights of full moon the bat reduces its flying and feeding by up to 55%, remaining inactive between feeding roosts for as long as 4 hours compared to its usual 15 minute interval when the moon is not full. This bat helps in dispersion of seeds through defecation.

REPRODUCTION. Between July and September there are two consecutive breeding seasons followed by a dormant period**.** After the birth the endometrium (lining of the uterus) can be reabsored allowing the mother to be pregnant while still breast feeding her young (Willis, 1990).

BEHAVIOUR. *Vampyrodes caraccioli* flies less during bright moonlight. This is a way of decreasing their vulnerability to predators such as opossums and owls. Predation pressure is implicated in the evolution of both foraging and roosting behaviours. Individuals hang upside down from the fronds while resting during the day and when eating.

APPLIED ECOLOGY. *Vampyrodes caraccioli* is threatened by deforestation, but the species' vulnerability is low since it is widespread. In order to protect the species conservation acts have been implemented in some areas (Garcia, 2014). Some conservation plans are reforestation and protected areas in its range (Miller and Reid, 2008).

REFERENCES

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Fig. 2. White stripe along the back of *Vampyrodes caraccioli.*

[http://www.milbourne.net/HOSTEDSITES/nigelmilbournephotography/trinidadgallery.html, downloaded 20 February 2016]

Fig. 3. Arm extension of *Vampyrodes caraccioli.*

[http://zoologia.puce.edu.ec/Vertebrados/mamiferos/FichaEspecie.aspx?Id=2011, downloaded 20 February 2016]

Fig. 4. Geographic distribution map of *Vampyrodes caraccioli.*

[http://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T22842A9395281.en, downloaded 24 February 2016]

Fig. 5. *Vampyrodes caraccioli* eating a fruit.

[http://static.inaturalist.org/photos/760574/medium.jpg?1396384926, downloaded 14 March 2016]