

NOTES

Sea-skimming by Seychelles fruit bats

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The Seychelles fruit bat (*Pteropus seychellensis* Milne Edwards, 1887) is endemic to the Seychelles islands, with closely related species on Aldabra and the Comores. The Seychelles taxon is widespread, with breeding populations on the islands of Mahé, Silhouette, North, Praslin, Round, Aride, Felicite, Marianne and La Digue. All of these are relatively small islands (19-15,252 hectares) and none is isolated by more than 8km of open sea. Fruit bats have been seen flying over the sea between islands, visiting islands such as Cousine which do not have permanent breeding populations (P. Hitchins pers. comm.).

Over the past few years there have been anecdotal reports of Seychelles fruit bats flying low over the sea, apparently drinking. These reports, by a number of different observers, always describe a single bat flying down from a hill or mountain and dipping down to the surface of the sea. In none of the observations could it be determined for certain what the bat was doing and it was assumed that it must have been drinking. Observations have been made from the islands of Mahé, Silhouette and Aride in different months of the year (including January, March and October) but always when the sea was calm.

On 15th March 2002 a fruit bat was observed descending to the sea at Anse Patates, Silhouette island. The bat was observed from a boat approximately 300m off shore, and was estimated to be 150m away from the boat and an equal distance to the shore. Sea conditions were calm, with no air movement. The bat dipped down to the surface of the sea 4 times in the space of 2 minutes (13:07-9hrs). Due to the proximity to the bat it was possible to see that as the bat descended to the surface of the sea it dipped its breast into the water. The head was raised slightly, preventing the mouth contacting the sea. The behaviour was observed frequently in 2003; several times off the coast of Praslin and in March 2003 at least 8 bats were seen dipping down to the sea at Anse Mondon on the north coast of Silhouette. This included one bat making three repeat flights to the sea. All these bats were roosting in trees along the coast.

From these observations it is clear that the bats were not drinking but were deliberately immersing its fur in the sea. Salt-water immersion may be a strategy to remove parasites which would be expected to be abundant in a social mammal. Although this may be an effective way of removing parasites, bats using this behaviour may be at risk of falling in the sea, a risk which would be minimised by choosing exceptionally calm weather.

Of other fruit bat species *P. giganteus* has been reported to be associated with water, flying over open sea and there are reports of this species drinking sea water to obtain mineral salts otherwise lacking from the fruit diet (Novak & Paradiso 1984). However, coastal fruit bats may be expected to be able to obtain sufficient salts from sea-spray on leaves rather than

using the risky strategy of drinking over the open sea and this observation in *P. giganteus* may have been misinterpreted. Deliberate salt-water immersion does not appear to have been reported from other bats, although it may easily be confused with drinking and it could be a useful parasite removal strategy for other island fruit bat species.

References

Novak, R.M. & Paradiso, J.L. 1984. *Walker's Mammals of the World*. Vol. 1. 4th Edition, John Hopkins University Press, Baltimore, Maryland.

NOTES

Observations on some reptiles in Seychelles

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The lizard fauna of Seychelles plays important roles in food webs as predators of invertebrates, as consumers of the eggs of seabirds and the fish and other prey that they drop in flight and from their nests (Brook & Houston 1983) and carrion (Gerlach 1999), and as the prey of birds such as the Seychelles kestrel (*Falco araea*) and the Madagascar coucal (*Centropus toulou insularis*) and even the hunting spider *Rhitymna valida* (Blackwall, 1877) (Ineich & Ineich 1993; Matyot 2001). In spite of several studies (Cheke 1984), many gaps remain in our knowledge of the distribution, biology and ecology of all species. The following observations were made incidentally during research on lizard-insect interactions.

1. *Hemidactylus frenatus* Duméril & Bibron, 1836 (Order Squamata: Family Gekkonidae)

I previously reported the presence of the “wandering gecko”, *Hemidactylus mercatorius* Gray, 1842 on Mahé island (Matyot 2001). We now know that the “barking gecko”, *H. frenatus*, previously known only from the outer, coralline, islands, is present on both Mahé and Praslin. During the period January 1999-June 2003 a call typical of this species, a “multiple chirp call, a gack-gack-gack suggestive of the barking of a small dog” (Marcellini 1974) was heard on many occasions in the vicinity of houses at Hangard Street, La Rosière and Hermitage and inside the radio station of the Seychelles Broadcasting Corporation (SBC) at Union Vale (all localities near Victoria on Mahé) and at the airport at Amitié on Praslin (at the latter heard in July 2002). A gecko that was uttering such a call was noticed twice, in the evening, near a wall light inside a house at La Rosière and several times, during the day, near a ceiling light that had been switched on inside the production office of SBC AM Radio at Union Vale (probably one individual demonstrating site fidelity). In the majority of cases it was not possible to identify the species with certainty because the animal retired into a crevice at the slightest attempt to approach it, but during the second sighting at La Rosière and once at SBC Radio I was able to make out small tubercles on the uniformly coloured back and spinose scales along each side of the tail as well as extremely reduced first (inner)