

A note on the herpestids and viverrids of south-eastern Unguja (Zanzibar) Island

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During April of 1997 the authors undertook a preliminary survey of the fauna of the south-east of Unguja Island, with special emphasis on the leopard. Zanzibar, part of a federation with mainland Tanzania, consists of several islands, the principal of which are Unguja and Pemba. Unguja lies some 40 kilometres from the African mainland and extends over an area of approximately 1650 km². It is a low-lying island with the highest point being at 110 m above-sea-level.

The principal topographical features are the north-south running parallel ridges of Machui and Masingini. The gently undulating coastal belt averages five to six kilometres in width and in the east it is dominated by what is known as *coral-rag thicket*. The central and western areas of the island are the most fertile and therefore have the highest human population densities, although major man-made impacts are obvious throughout the island.

Pakenham (1984) recorded five species of herpestids and viverrids on the island of Unguja, *Bdeogale crassicauda tenuis*, *Galerella sanguinea rufescens*, *Mungos mungo*, *Civettictis civetta schwarzi*, and *Viverricula indica rasse*. An additional species, *Atilax paludinosus rubescens*, has only been recorded on Pemba Island and not on Unguja.

Records seem to indicate that *Mungos mungo* was introduced to the island from the mainland but we found no evidence that this social mongoose occurs anywhere in the south-eastern sector of the island; whether it occurs elsewhere was not investigated. The presence of an additional species was confirmed during the course of the present survey, on the basis of clear tracks, a genet, *Genetta* sp.

Zanzibar slender mongoose

Galerella sanguinea rufescens

We made 25 sightings of this small mongoose during the course of the survey, in a wide variety of habitats, that included scrub thicket on coral rag, fringes of the Jozani Forest but never in its core, in cultivated fields of cassava, bananas, and on the edges of rice paddies. Only solitary animals were sighted and all had a dark to light reddish-brown coloured pelage.

Zanzibar bushy-tailed mongoose

Bdeogale crassicauda tenuis

The nine records of this mongoose were based on examination of their distinctive tracks, with which the authors are familiar from the mainland. Nearly all records were taken in and around the Jozani Forest. Despite several hours of night-driving on forest tracks no sightings were made. Local villagers questioned were familiar with this species.

Genet *Genetta* sp.

A skin and damaged skull of a servaline genet (*Genetta servalina*) were collected in 1995 by Anthony L. Archer from ca. 4 km south of Jozani Forest (Van Rompaey & Colyn, 1998), the first indication that genets were in fact present on the island. During the course of the current survey we located and photographed clear genet tracks imprinted in the mud of a jeep trail in the Jozani Forest. Despite regular searches in the same general area over a period of several days no further tracks were found.

African civet

Civettictis civetta schwarzi

A total of 23 records of this species were noted, coming mainly of fresh tracks but also one animal found dead on a forest trail (possibly shot) and one individual "caught" on film by an automatic camera. They occurred throughout the survey area, in coral rag thicket, stands of red mangrove, cultivated areas that included rice paddies, within the Jozani Forest and once on the beach above the high water mark. A common species that is on occasion shot by villagers.

Although no detailed examination of dung contents at midden sites was undertaken, the fruits of a number of tree and bush species obviously made up a considerable amount of their intake during April of 1997. Although it probably occurred naturally on the island, it is possible that animals were introduced by man centuries ago in order to extract the anal gland secretion! See the next species.

Javan civet

Viverricula indica rasse

Only four definite locations for this species were recorded, on the basis of clear tracks, once on the beach, twice in the north of the Jozani Forest, and once in the Kiwengwa Forest. This species was introduced to the island, possibly by Javanese traders as early as the 12th century, for extraction of the anal gland secretion that was used as a "perfume". The Zanzibari Arabs prized the secretion as a medicine.

References

- Pakenham, R. H. 1984. *The mammals of Zanzibar and Pemba Islands*. Privately published. 81 pp.
Van Rompaey, H. & Colyn, M. 1998. A new servaline genet (Carnivora, Viverridae) from Zanzibar Island. *S. Afr. J. Zool.*, 33(1): in press.

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Species	Date	Location	GPS fix	Habitat	Remarks
<i>Galerella sanguinea</i> Slender mongoose	03.04.1997	South of Bungu	5 38.0 E / 93 07.3 N	Mango and coconutpalm plantation	Sighting
	07.04.1997	Jugakuu near Paje	5 55.1 E / 93 07.0 N	Coral rag thicket	Sighting
	09.04.1997	Jozani village	5 47.4 E / 93 06.8 N	Clearing in forest	Sighting
	11.04.1997	South of Paje along coast	5 59.2 E / 93 06.3 N	Coastal coral rag thicket	Sighting
	12.04.1997	Western edge of Jozani Forest	5 45.0 E / 93 06.3 N	Coral rag forest	Tracks
	12.04.1997	Western edge of Jozani Forest	5 44.6 E / 93 07.7 N	Coral rag forest	Tracks, very fresh
	12.04.1997	Paje	5 55.9 E / 93 07.1 N	Coral rag thicket	Sighting
	12.04.1997	Paje	5 56.3 E / 93 07.2 N	Coral rag thicket	Sighting (sick)
14.04.1997	Uzingwi, nr. Jendele	5 41.0 E / 93 16.3 N	Rice fields, palm plantations	Sighting	
14.04.1997	Kwebona, Unguja Ukuu	5 40.6 E / 93 06.3 N	Fields nr. village, coral rag	Sighting	
15.04.1997	Jozani	5 47.2 E / 93 07.4 N	Coral rag forest	Sighting	
15.04.1997	Charawe	5 48.9 E / 93 16.6 N	Coastal coral rag thicket	Sighting	
18.04.1997	Paje police station	5 58.4 E / 93 07.6 N	Coastal coral rag thicket, edge of settlement	Sighting	
20.04.1997	Jozani Forest	5 47.3 E / 93 11.2 N	Coral rag forest	Tracks	
20.04.1997	Jozani Forest	5 46.6 E / 93 11.3 N	Coral rag forest	Tracks	
20.04.1997	Jozani Forest, Jimbini	5 46.2 E / 93 11.5 N	Bracken field	Tracks	
21.04.1997	Jozani Forest, northern section	5 47.0 E / 93 13.2 N	Coral rag forest	Tracks	
23.04.1997	South of Jozani	5 46.7 E / 93 06.4 N	Coral rag thicket near mangroves	Tracks	
24.04.1997	Jozani Forest, Totani	5 46.5 E / 93 11.4 N	Coral rag forest	Tracks	
24.04.1997	Jozani Forest, Jimbini	5 46.3 E / 93 11.5 N	Bracken field	Tracks	
24.04.1997	Magumbani	5 52.5 E / 93 03.4 N	Coral rag forest	Sighting	
25.04.1997	Mamli	5 55.4 E / 93 01.0 N	Coral rag forest	Tracks	
26.04.1997	Jozani Forest, road to Charawe	5 47.0 E / 93 08.8 N	Coral rag forest	Sighting	
27.04.1997	Kilombero	5 36.1 E / 93 34.0 N	Rice fields	Sighting	
29.04.1997	Between Bwejuu and Paje	5 58.8 E / 93 09.3 N	Coconut palms on coastal plain	Sighting	
<i>Bdeogale crassicauda</i> Bushy-tailed mongoose	12.04.1997	Western edge of Jozani Forest	5 44.6 E / 93 08.0 N	Coral rag forest	Tracks
	12.04.1997	Western edge of Jozani Forest	5 44.5 E / 93 08.2 N	Bracken field in forest	Tracks
	12.04.1997	Jozani Forest	5 46.2 E / 93 11.5 N	Bracken field in forest	Tracks
	19.04.1997	Michamvi	5 56.1 E / 93 22.1 N	Coral rag thicket	Tracks
	20.04.1997	Jozani Forest, Jimbini	5 46.2 E / 93 11.5 N	Brackenfield	Tracks
	21.04.1997	Jozani Forest, northern section	5 47.9 E / 93 11.8 N	Coral rag forest	Tracks
	21.04.1997	Jozani Forest, northern section	5 47.0 E / 93 13.2 N	Coral rag forest	Tracks
	24.04.1997	Magumbani	5 52.7 E / 93 00.7 N	Coral rag forest	Tracks
25.04.1997	Mamli	5 54.6 E / 93 00.6 N	Coral rag forest	Tracks	
<i>Civettictis civetta</i> African civet	05.04.1997	Kichanga	5 46.8 E / 93 05.2 N	Old bananfield near mangroves	3 middens
	06.04.1997	Northern section of Jozani Forest	5 45.8 E / 93 10.5 N	Open lower forest	Tracks
	09.04.1997	Between Paje and Bwejuu	5 58.8 E / 93 09.5 N	Transition between coral rag brush and coconut palm plantation on coastal sand	Tracks
	12.04.1997	Western edge of Jozani Forest	5 44.9 E / 93 07.1 N	Coral rag forest	Droppings
	12.04.1997	Western edge of Jozani Forest	5 44.5 E / 93 08.2 N	Bracken field in forest	Tracks
	12.04.1997	Western edge of Jozani Forest	5 44.5 E / 93 08.9 N	Coral rag forest	Tracks
	12.04.1997	Western edge of Jozani Forest	5 44.4 E / 93 09.2 N	Coral rag forest	Tracks
	15.04.1997	Jozani Forest, northern section	5 47.0 E / 93 12.9 N	Open coral rag forest	Droppings, marks
	17.04.1997	Jozani Forest, northern section	5 46.7 E / 93 12.6 N	Open coral rag forest	Mark on twig
	17.04.1997	Jozani Forest	5 47.6 E / 93 11.4 N	Coral rag forest	Calling
	18.04.1997	Jozani Forest, northern section	5 46.3 E / 93 12.7 N	Coral rag forest	Dead specimen
	19.04.1997	Mkokoni, north of Bwejuu	5 58.8 E / 93 14.4 N	Coral rag thicket	Tracks
	20.04.1997	Jozani Forest	5 46.5 E / 93 11.4 N	Coral rag forest	Tracks
	20.04.1997	Jozani Forest, Jimbini	5 46.2 E / 93 11.5 N	Bracken field	Tracks
20.04.1997	Jozani Forest	5 46.3 E / 93 11.5 N	Coral rag forest	Tracks	
21.04.1997	Jozani Forest, northern section	5 47.0 E / 93 13.2 N	Coral rag forest	Tracks	
23.04.1997	South of Jozani	5 47.0 E / 93 06.3 N	Coral rag thicket near mangroves	Tracks	
24.04.1997	Jozani Forest, northern section	5 47.3 E / 93 13.0 N	Coral rag forest	Tracks	
25.04.1997	Jambiani to Mamli	5 57.4 E / 93 01.7 N	Coral rag thicket	Tracks, big	
26.04.1997	Jozani Forest, northern section	5 47.8 E / 93 12.3 N	Coral rag forest	Tracks	
26.04.1997	Jozani Forest	5 47.6 E / 93 11.0 N	Coral rag forest	Tracks	
26.04.1997	Jozani Forest	5 47.6 E / 93 11.1 N	Coral rag forest	Tracks	
27.04.1997	Kiwengwa	5 44.5 E / 93 33.8 N	Coral rag forest nr. coast	Tracks	
<i>Lyverricula indica</i> Indian civet	11.04.1997	Kijibwe Chui, south of Paje	5 59.8 E / 93 04.3 N	Sandy beach	Tracks
	21.04.1997	Jozani Forest, northern section	5 47.0 E / 93 13.2 N	Coral rag forest	Tracks
	24.04.1997	Jozani Forest, northern section	5 47.9 E / 93 12.1 N	Coral rag forest	Tracks
	27.04.1997	Kiwengwa Forest	5 42.6 E / 93 36.6 N	Coral rag forest near coast	Tracks
<i>Genetta sp.</i> Genet	20.04.1997	Jozani Forest, Jimbini	5 46.2 E / 93 11.5 N	Bracken field	Tracks