# Rusty-spotted Genet Genetta maculata



Namibian conservation status	Least Concern
Global IUCN status	Least Concern
Namibian range	~636,400 km <sup>2</sup> Mesic woodlands of north-east Namibia, possibly into parts of drier north-west Namibia. Often found in close proximity to the northern perennial rivers, especially the Okavango
Global range	Widely but sparsely distributed throughout most of sub-Saharan Africa, except for central and southern Namibia, Botswana and South Africa
Population estimate	~10,000–15,000
Population trend	Stable, possibly decreasing
Habitat	Evergreen or deciduous woodland. Relatively common in the mesic north-east, where they prefer the dense riparian forests of perennial rivers
Threats	<ul> <li>Deforestation</li> <li>Indiscriminate carnivore poisoning</li> <li>Frequent woodland fires in the Kavango and Zambezi Regions</li> <li>Poaching for meat and decorative pelts</li> <li>Roadkills</li> </ul>

## **DISTINGUISHING CHARACTERISTICS**

Rusty-spotted genets, also known as large-spotted genets, are similar in stature and size to small-spotted genets (*G. genetta*). They can be slightly heavier, but this is not a useful field feature. Coat patterns vary tremendously within the species, with the ground colour being off-white to buffy yellow. The spots along the body are quite large and separate from each other, and are black with brown or rusty-colouring in the centre of each spot. There is a mid-dorsal line, the same colour as the spots, the length of the body. They lack the raiseable crest of hairs along the back which is found in small-spotted genets. The legs are off-white, but

the hind feet may be black below. The tail usually has a black tip (Stuart & Stuart 2001, Gaubert *et al.* 2005, Skinner & Chimimba 2005, Angelici & Gaubert 2013).

## DISTRIBUTION

The phylogeny of the *Genetta* genus is complex and not fully resolved (Angelici *et al.* 2016). Here we follow the classification suggested by Gaubert *et al.* (2005), which separates rusty-spotted genet (*G. maculata*) from Cape genet (*G. tigrina*), both of which have large spots and have been lumped together as large-spotted genet before. The small-spotted genet (*G. genetta*) remains a separate Distribution records of rusty-spotted genet, and present estimated area of distribution in Namibia.

Inset: African distribution of rusty-spotted genet according to IUCN (Angelici *et al.* 2016).

The Namibian distribution in the main map is more up to date and does not necessarily agree with the distribution shown in the inset.



species. There is a further school of thought which proposes *G. maculata* as a super-species, encompassing several other species across Africa, including *G. tigrina* (Gaubert *et al.* 2004).

Rusty-spotted genets occur irregularly across much of north-east Namibia's woodlands (Angelici et al. 2016) often in proximity to perennial rivers (Angelici & Gaubert 2013). There have been isolated sightings from the drier northern Kunene Region (Environmental Information Service 2021). Their distribution overlaps with small-spotted genets and the species are known to occur sympatrically (Roux et al. 2016, Carvalho et al. 2016). Northern Namibia represents the southern extent of the distribution of rusty-spotted genet, which stretches across most of central Africa between north-central Namibia and 10° north of the Equator (Skinner & Chimimba 2005, Angelici & Gaubert 2013, Environmental Information Service 2021). They mostly avoid the arid and semi-arid parts of the country where true woodland is either absent or too sparse, and water is scarce. They were previously thought to be restricted to areas along the perennial rivers of Kavango West, Kavango East and Zambezi Regions (Shortridge 1934, Skinner & Chimimba 2005), occurring there as a range extension, and possibly a subspecies, of the South African large-spotted genet (G. tigrina) (Skinner & Chimimba 2005) which is common in the

mesic eastern parts of South Africa. However, since 2005, rusty-spotted genets have been recognised as a separate species to the Cape large-spotted genet which occurs in the southern and western part of South Africa (Gaubert *et al.* 2005).

## **POPULATION ESTIMATE AND TREND**

Rusty-spotted genets are relatively common across their range, but are rarely encountered in relation to small-spotted genets. With no studies of the species in Namibia, the home-range sizes and densities are not known. A study in eastern South Africa found overlapping male and female home-ranges of approximately 3.3 km<sup>2</sup> (Roux 2017). A study in Kenya found similar female home-range sizes but male home-ranges were roughly double that size (Fuller *et al.* 1990). As an extrapolation of these studies and consideration of lower habitat productivity in Namibia, the population is estimated at approximately 10,000 to 15,000 individuals. Roux *et al.* (2016) estimated the South African population at 10,000.

Rusty-spotted genets are water-dependent and do not occur in arid or semi-arid habitats. With climate change likely leading to increased aridity across much of Namibia (Turpie *et al.* 2010), the range of this species is expected to shrink.

## ECOLOGY

Rusty-spotted genets are almost exclusively nocturnal (Fuller *et al.* 1990, Skinner & Chimimba 2005, Roux *et al.* 2016). They are solitary or occasionally occur in pairs, using woodland thickets, aardvark burrows or rock shelters as cover during the day (Skinner & Chimimba 2005, Angelici & Gaubert 2013, Angelici *et al.* 2016). As a large proportion of their diet consists of rodents, they are often found in close proximity to cultivated fields (Widdows *et al.* 2015, Sogbohossou & Aglissi 2017) where gerbils and mice concentrate. They also feed on insects and occasionally fruit (Roux *et al.* 2016, Zemouche 2018).

## THREATS

The reliance of rusty-spotted genets on healthy woodland and their preference for riparian forest makes them vulnerable to accelerated deforestation and frequent bushfires, which are prevalent in the Kavango East and Zambezi Regions (Pröpper & Vollan 2013).

The Namibian population represents the southernmost extent of the species, making it vulnerable to changes in climate or habitat.

Roadkills are responsible for some mortalities in other countries (Roux *et al.* 2016), but none have been recorded to date in the Namibian Mammal Atlas (Environmental Information Service 2021). The inconsiderable road network in their Namibian range limits the effect of this factor on the population.

Rusty-spotted genets are sometimes used for meat and their pelts for decorative dress, but their shy habits make them difficult to capture or hunt.

## **CONSERVATION STATUS**

Rusty-spotted genets have been classified globally as Least Concern in the 1996, 2008 and 2016 global red list assessments (Gaubert *et al.* 2008, Angelici *et al.* 2016). Without any clear indications of a population decrease, the Namibian status of Least Concern is retained, but if deforestation in the Kavango and Zambezi continue at current rates the species may be threatened in future.



#### ACTIONS

Protection of riparian forest and surrounding woodland will likely improve population numbers. Conducting nocturnal mammal surveys across the range of the species, similar to those by Hauptfleisch (2016) in Kavango East, will improve understanding of the species' distribution range and densities.

There have been no studies on the ecology, habits and behaviour of rusty-spotted genets in Namibia. Such studies could be usefully combined with population surveys of this and other small carnivores.

To prevent an increase in road mortalities, speed limits in the parks and communal conservancies across the range need to be enforced, and environmental assessments for roads and other developments within the range of the species need to include possible impacts on small carnivores. These include timber harvesting and road construction.

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