

## Spotted-necked Otter *Hydrictis maculicollis*



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Namibian conservation status	Near-Threatened Nature Conservation Ordinance (1974) Schedule 4: Defined as “Protected Game”
Global IUCN status	Near Threatened Listed on CITES Appendix II
Namibian range	Confined to the perennial rivers in the north and north-east
Global range	Widespread in sub-Saharan Africa, but less so than the African clawless otter
Population estimate	Insufficient data to make an estimate
Population trend	Thought to be decreasing
Habitat	Perennial rivers and associated riverine vegetation
Threats	<ul style="list-style-type: none"> <li>▶ Wetland degradation, including clearing and alteration of riparian vegetation</li> <li>▶ Possibly persecuted by fishermen who see it as a threat to fish resources</li> <li>▶ Killed unintentionally and possibly intentionally in fish traps and nets</li> <li>▶ Killed for bushmeat and possibly for other body parts</li> <li>▶ Climate change, which will increase human pressure on wetlands</li> <li>▶ Lack of information on otters generally</li> </ul>

### DISTRIBUTION

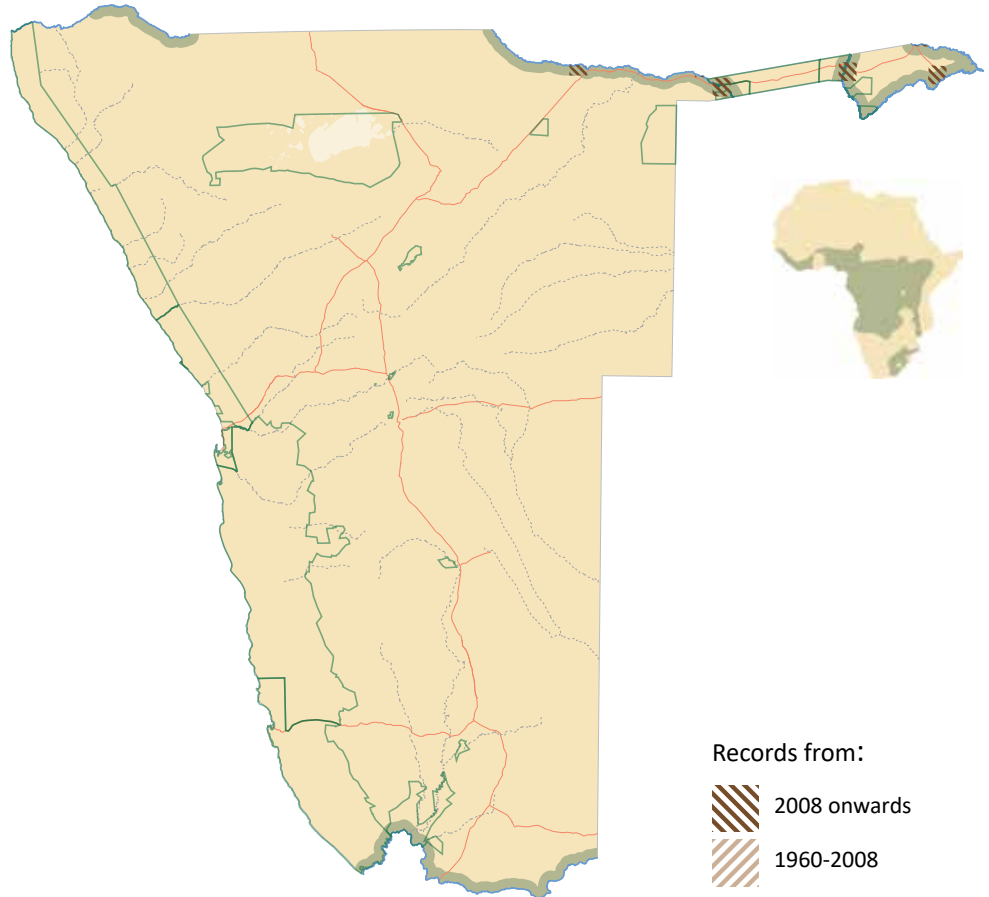
The spotted-necked otter is less widely distributed in sub-Saharan Africa than the African clawless otter *Aonyx capensis*. While the overall distribution range is large, it only occupies larger rivers and lakes within this range (Reed-Smith *et al.* 2015b). It occurs only in fresh-water ecosystems

and is more aquatic than the African clawless otter, which prevents it from moving over land to use ephemeral ponds or river systems (Nel & Somers 1998, Skinner & Chimimba 2005). It is absent from the eastern half of Tanzania, most of Zimbabwe, all but the northern portions of Botswana and Namibia, and the western half of South Africa (Rowe-Rowe 1990).

Distribution records of spotted-necked otter, and present estimated area of distribution in Namibia.

Inset: African distribution of spotted-necked otter according to IUCN (Reed-Smith *et al.* 2015b).

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



The confirmed range for this species in Namibia is limited to the northern perennial rivers and wetlands, where it is known mainly from rivers in the Zambezi Region and along the Kunene River (d’Inzillo Carranza & Rowe-Rowe 2013). There is one published sighting of an individual on the Orange River in the |Ai-|Ais–Richtersveld Trans-Frontier Conservation Area in August 2008, about 1,200 km west of its known range in South Africa (Power & Slater-Jones 2010).

### POPULATION ESTIMATE AND TREND

Spotted-necked otters were recorded as rare in Namibia (Nel & Somers 1998), although this assessment is now 20 years old and no current or accurate population estimates are available. According to the global IUCN assessment (Reed-Smith *et al.* 2015b), this species is declining.

### ECOLOGY

As the smaller of the two otter species, the spotted-necked otter weighs 3.8–6.6 kg, with males slightly bigger than females (Skinner & Chimimba 2005). Besides size, the white spotted or mottled upper chest distinguishes this species from the African clawless otter; the rest of the coat is chocolate to reddish-brown. The feet are webbed and have sharp claws, which helps differentiate their tracks from the

other otter species (Skinner & Chimimba 2005).

These otters usually forage in pairs or groups of three (usually mother and pups), although groups of up to 12 individuals have been recorded in Tanzania (Reed-Smith *et al.* 2014). Home ranges within and between sexes overlap; male home ranges are about four times larger than female ranges, according to a radio telemetry study in the Drakensberg in South Africa (Perrin *et al.* 2000). They are largely diurnal, with activity peaks in the morning and afternoon, but do also forage at night (Perrin & D’Inzillo Carranza 2000, Jordaan 2017).

Spotted-necked otters are considered to be more piscivorous than African clawless otters, according to studies in South Africa where these species are sympatric (Somers & Purves 1996, Perrin & Carugati 2000, Jordaan *et al.* 2019). Their diet in the Drakensberg (Perrin & Carugati 2000) and the Eastern Cape (Somers & Purves 1996) includes fish, crabs and frogs, in that order of prevalence. The fish taken are usually small ( $\leq 20$  cm, Rowe-Rowe 1977), although they can take larger individuals of introduced fish species in Tanzania (Kruuk & Goudswaard 1990).

The spotted-necked otter prefers riverbanks and oxbow lakes with sufficient cover near the water, in the form of dense

vegetation or boulders, particularly for holt sites (Rowe-Rowe 1992, Perrin & Carugati 2000). In Tanzania, signs of the species were found in undisturbed and disturbed (due to human or livestock activity) habitat close to the water edge, but not in cultivated fields adjacent to water (De Luca *et al.* 2018). This species also requires high prey visibility and thus clear, relatively unpolluted water in which to hunt (Larivière 2000).

## THREATS

The key threats to spotted-necked otters throughout their range are habitat loss or degradation, depletion of freshwater fish stocks, human-otter conflict and water pollution (Reed-Smith *et al.* 2014). They may also be killed intentionally for food or traditional medicine (known from East Africa only) or unintentionally when entangled in fishing nets (Reed-Smith *et al.* 2010).

It is likely that clearing riparian vegetation for agriculture, burning reed beds, and overgrazing riparian vegetation threaten this species in north-eastern Namibia. Increased agricultural activities will likely lead to water pollution that will also negatively affect both otter species (Kubheka *et al.* 2013).

Fish stock depletion and conflict with fishermen are likely to threaten this species more than the African clawless otter, due to its greater dependence on fish. Whether or not fishermen kill otters due to this conflict is not yet known for Namibia, although fishing communities elsewhere kill otters due to damage to fishing equipment or direct competition for fish (Rowe-Rowe 1990, Reed-Smith *et al.* 2010, Akpona *et al.* 2011, De Vos 2018). The combination of increasing human populations and climate change are likely to exacerbate any existing human-otter conflict, with the twin impact of reduced river flows and declining fish stocks upon which both otters and local communities depend (Reed-Smith *et al.* 2015b).

Despite the potential threats to otters and suspected decline in this species, no conservation or research is being done on spotted-necked otters in Namibia. There is a general lack of awareness about otter conservation in the country, which may lead to otter declines going unnoticed and unmitigated.

## CONSERVATION STATUS

As for the African clawless otter, the IUCN assessment of this species (Reed-Smith *et al.* 2015b) reports that otters in Africa are faced with habitat loss or degradation, polluted

waters, and/or degraded aquatic ecosystems, as well as increasing human pressure on their prey base and reduction of resting and denning sites. These factors are expected to cause a 20% decline in the spotted-necked otter population over the next three generations (i.e. 23 years from 2015), which prompted the uplisting from Least Concern to Near Threatened in 2015.

Although the threats to spotted-necked otters have not been quantified in Namibia, it is likely that habitat degradation and human-otter conflict occur along the more densely populated areas in the Zambezi Region where people rely on subsistence agriculture and/or fishing. We therefore apply the Near Threatened global status to the Namibian spotted-necked otter population.

## ACTIONS

More information is required on both otter species to inform conservation actions. In particular, otter populations must be monitored to detect trends over time and flag areas that currently host otters. See the African clawless otter assessment for suitable monitoring methods.

Protecting fish stocks is critical for spotted-necked otter conservation. The Ministry of Fisheries and Marine Resources published three Government Notices on the 15 December 2016: they prohibit the use of monofilament fishing nets (No. 296); establish a closed fishing season on the Chobe and Zambezi Rivers from December to February each year (No. 297); and declare a community-based Fisheries Reserve in Impalila Conservancy in the Zambezi Region (No. 298). Fisheries Reserves are no-fishing zones established by local communal conservancies to improve the health of their fish stocks. Ideally, these Fisheries Reserves would include suitable otter habitat and will support known otter populations. Further research is thus urgently needed to inform these plans.

Other key actions include regulating agricultural practices near rivers to limit otter habitat destruction and water pollution, and engaging with fishing communities to assess their attitudes towards and impacts on otter populations. Depending on these findings, it may be necessary to run awareness campaigns about the importance of otters to healthy freshwater ecosystems and/or create incentives for people to tolerate otter presence. Incentives could include developing and promoting otter-centred tourism activities that benefit local communities.

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