

MACCOA DUCK | *Oxyura maccoa*

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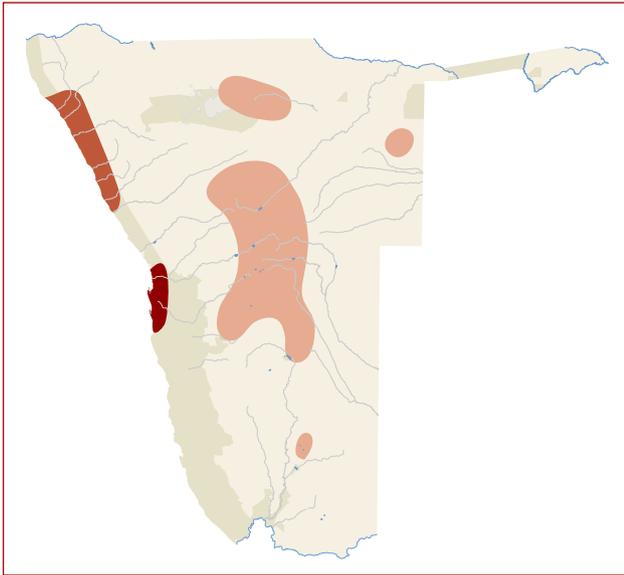
Conservation Status:	Near Threatend
Southern African Range:	Namibia, Botswana, South Africa, Lesotho, Zimbabwe
Area of Occupancy:	126,000 km ²
Population Estimate:	2,000 to 3,000 birds
Population Trend:	Relatively stable in Namibia
Habitat:	Open-water dams, small farm dams, brackish coastal bays and river mouths
Threats:	Pollution, habitat loss



DISTRIBUTION AND ABUNDANCE

This striking stiff-tailed duck is endemic to East Africa and southern Africa with a large distribution gap between these populations (Rose & Scott 1996). The global population is estimated at between 9,000 and 11,500 birds (IUCN 2012a). In southern Africa the population is estimated at 7,000 to

8,250 birds (Nagy *et al.* 2012), of which between 4,500 and 5,500 birds occur in South Africa (Berruti *et al.* 2005). The bird is virtually unknown in Botswana's main wetlands (Tyler 2001), and is considered rare in Zimbabwe (Maclean 1997d) and Angola (Dean 2000), but core populations exist in coastal and central Namibia (Maclean 1997d) and in the Western Cape and Free State provinces of South



Africa. It occupies an area of 126,000 km² in Namibia; large concentrations have been found on dams such as Borodimo Dam (106 birds in April 1996), Friedenau Dam (112 birds in January 1993) and the Walvis Bay Sewage Works (129 birds in July 1996), demonstrating the importance of artificial impoundments for this species. These concentrations rarely persist, indicating regular movements around Namibia and elsewhere in southern Africa (Maclean 1997d). The species does not frequent the more tropical wetlands of northern Namibia and has disappeared from Sandwich Harbour with the loss of the freshwater wetland habitat there (Simmons 1991, H Kolberg unpubl. data), but is found at river mouths such as the Hoanib, Swakop and Orange, and occasionally at flooded ephemeral pans in the Tsumkwe district and Etosha (Jarvis *et al.* 2001). Namibia's population, which may be augmented by birds from South Africa and Botswana, is estimated to number at least 2,000 birds from the simultaneous sum of all birds from the richest year (July 1992) in the period 1990 to 2001 (Jarvis *et al.* 2001), or 25% of the southern African population, but the presence of Maccoa Ducks in flocks of other duck species on various dams throughout the country suggest that it could number up to 3,000 birds (H Kolberg pers. obs.).



ECOLOGY

The Maccoa Duck usually occurs in small numbers and is found most commonly in large open-water dams or brackish coastal bays, and less frequently in small farm dams, sometimes in highland areas. It is believed to breed in the highland wetlands and to find refuge from predators, possibly while moulting, in the larger dams (AJ Williams pers. obs.). Nests are constructed among emergent vegetation over deep water, occasionally in old Red-knobbed Coot *Fulica cristata* nests. It is polygynous (Colahan 2005) and typically lays a clutch of five to six eggs (Tarboton 2001). The 21 breeding records from Namibia indicate that laying

occurs mainly between January and May (86% of clutches), with three to seven eggs (mean=5) and broods of one to five young (Jarvis *et al.* 2001, Brown *et al.* 2015). Survival rates and overall breeding success of the species are not known. This species feeds mainly on benthic invertebrates, including chironomid fly larvae and pupae, crustaceans and molluscs, as well as on seeds and roots of water plants and on algae (Maclean 1993).



THREATS

The Maccoa Duck suffers from few threats, given that it has adapted well to man-made impoundments in arid areas of Namibia, and is thought to have expanded its range during the last century (Colahan 2005). Considering that its diet is dominated by benthic invertebrates, water pollution, and the associated bio-accumulation of pollutants, is of concern (Berruti *et al.* 2005). Habitat loss, for example at Sandwich Harbour, may also pose a threat (Berruti *et al.* 2005, Kolberg 2012c). Global warming may influence this species as a result of the likely drier conditions in southern Africa (Midgley *et al.* 2001) and the probable reduction in the frequency of inundation of ephemeral pans in arid parts of the region (Simmons *et al.* 2004).



CONSERVATION STATUS

This species is classified as *Near Threatened* because of a maximum population of about 3,000 birds in Namibia, representing 36% of the estimated southern African population. Declines are hard to determine because of the nomadic nature of this species, but numbers encountered in Namibian wetland counts between 1991 and 2008 have remained relatively stable, so there is no known or suspected decline that would move it into the *Vulnerable* category. It is classified globally as *Near Threatened*, based on its relatively small population size and some perceived declines (IUCN 2012a), and is also considered *Near Threatened* in South Africa (Taylor *et al.* in press). Updated population figures may qualify the species for *Vulnerable* status in future (IUCN 2012a). It is listed in Annex 2 of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA). The Maccoa Duck should be given *Specially Protected* status in revised or new Namibian Parks and Wildlife legislation.



ACTIONS

Simultaneous counts of Maccoa Ducks at dry-season accumulations (in July) may be the best method of monitoring population fluctuations. This and further studies of its breeding ecology are suggested in order to monitor this relatively uncommon species. Otherwise it is reasonably secure on the larger dams around Namibia, and these should be protected wherever large concentrations regularly occur.