

BLACK-NECKED GREBE | *Podiceps nigricollis*

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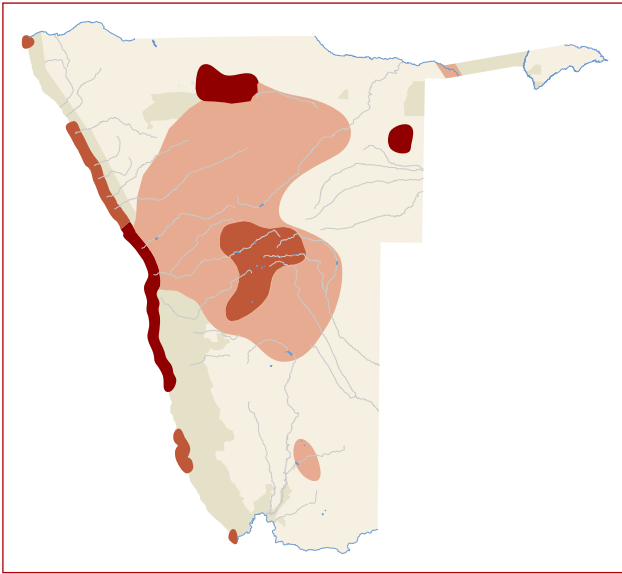
Conservation Status:	Near Threatened
Southern African Range:	Subspecies endemic to Namibia, Botswana, South Africa, Zimbabwe
Area of Occupancy:	320,000 km ²
Population Estimate:	Up to 24,000 birds
Population Trend:	Increasing
Habitat:	Coastal waters, hyper-saline pans, ephemeral wetlands, dams
Threats:	Wetland degradation, marine pollution, entanglement



DISTRIBUTION AND ABUNDANCE

The Black-necked Grebe is widely distributed throughout North and South America, Eurasia and Africa and is the commonest of the world's grebes. Of the three subspecies, *P. n. gurneyi* is endemic to southern Africa and is estimated to number between 20,000 and 30,000 birds (Nagy *et al.* 2012). It is concentrated along Namibia's central coast in winter, but disperses widely over inland Namibia and South Africa, where it breeds. Some individuals are sedentary on inland dams where they breed (Dean & Underhill 1997). It is, surprisingly, largely absent from the Okavango Delta in Botswana. Elsewhere in southern Africa it is rare, but with concentrations in South Africa in the south of the Western Cape and the Free State wetlands and impoundments (Dean & Underhill 1997). Its area of occupancy in Namibia covers 320,000 km².

Namibia is a vital link in its distribution, because the majority of the population forms large flocks in the non-breeding season on Namibia's coast. These flocks are particularly common in the coastal waters just off Walvis Bay; a maximum count of 23,853 birds at Walvis Bay in July 2008 represented 80% of the estimated maximum world population of the subspecies (Kolberg 2010). Large flocks also occur at Cape Cross Salt Works (maximum count 2,187 birds), Swakopmund Salt Works (maximum count 3,225 birds), Sandwich Harbour (maximum count 635 birds) and Conception Bay (maximum count 433 birds: Kolberg 2010). Flocks of up to about 500 birds are also found in sheltered bays around Lüderitz, particularly in summer (J Kemper pers. obs.). Inland, up to 650 birds occur at Nyae Nyae Pan in the ephemeral wetlands near Tsumkwe during breeding (Hines 1993, Jamieson *et al.* 2000, Jarvis *et al.* 2001). Populations are increasing; surveys from 1990 to 2012 have



on seven occasions (July 2000, 2004, 2007, 2008, 2010 and January 2010, 2012) recorded numbers of over 10,000 individuals and more than 5,000 birds on a further six occasions (Kolberg 2010).



ECOLOGY

This species is unusual among wetland birds in that it spends two periods of the year in two entirely different habitats: salt water and fresh water. Birds move inland with the rains, usually at night, and begin to breed as ephemeral wetlands are filled by summer thunderstorms (Dean & Underhill 1997). When breeding, it is found in loose colonies of up to 180 floating platform nests in ephemeral, vegetated freshwater pans in rank grass, often alongside other freshwater species such as Whiskered Terns *Chlidonias hybrida* and Red-knobbed Coots *Fulica cristata* (Hines 1993, Jamieson *et al.* 2000). In the Nyae Nyae Pans, the average colony size was 9.9 nests (n=46). It also breeds on dams and impoundments in otherwise arid areas in central and northern Namibia (Dean & Underhill 1997). Breeding dates for Namibia have egg-laying in January (three records), February (14) and March (33), with one record from August (Jamieson *et al.* 2000, Brown *et al.* 2015). Clutch size varies from two to eight eggs, with most nests containing three or four eggs (mean = 3.2, n=429) (Brown *et al.* 2015); at least two nests were parasitised by Whiskered Terns, but were not abandoned (RE Simmons pers. obs.).

In non-breeding periods, it occurs at sea just off the Namib Desert coast or is found in hyper-saline pans within salt work impoundments (Williams 1987b). It is also found in the hyper-saline Ekuma River before it dries up (W Versfeld pers. obs.). The prevalence of large flocks at salt works in Namibia and elsewhere arises from the range of different

salinities in the evaporation ponds, probably not present in nature. It feeds on small fish, aquatic insects and larvae, crustaceans and molluscs (Dean 2005d).



THREATS

Ephemeral freshwater wetlands are threatened in arid Namibia as a result of degradation through human pressure and overgrazing by livestock during and after flooding. Some of the breeding habitat for this species is likely to be protected in the Nyae Nyae Conservancy, while inland impoundments have extended the range of potential breeding sites. However, given that up to 80% of the population may be found in central Namibian coastal waters, it is highly vulnerable to pollution events, including oil pollution (Williams 1993), and increasing threats from fish oils in the Walvis Bay Harbour (K Wearne pers. obs.). Ever-increasing freight traffic through Namibia's harbour towns of Walvis Bay and Lüderitz, as well as growing industrialisation will add ship-borne and industrial effluent pollution. Gill nets set in Second Lagoon near Lüderitz pose an entanglement threat (J Kemper pers. obs.), as do nets discarded by fishermen, and plastics (Clining 1995). Incidents of locals herding flocks of Black-necked Grebes onto the shore and killing them for food have been reported from Lüderitz (J Burgess pers. obs.).



CONSERVATION STATUS

This subspecies is classified as *Near Threatened* because it is endemic to southern Africa and because of its dependence on two habitats that are either under threat of degradation (ephemeral wetlands) or under threat of marine pollution when it is massed in flocks near busy ports. The species is not listed globally because of its widespread distribution (IUCN 2012a). The species is listed in Annex 2 of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA) and should be given *Specially Protected* status in revised or new Namibian Parks and Wildlife legislation.



ACTIONS

Monitoring of the marine wintering population, when a large proportion of the population congregates along Namibia's central coast, will allow the best estimates of population size and trends. Why these birds assemble on Namibia's central coast and what exactly they feed on there has never been assessed. This information may become important if pollution levels pose a significant threat or if populations start to decline. Genetic analysis of this subspecies is also recommended to determine the limits of the population and its divergence (if any) from other Black-necked Grebe populations in Africa.