## HARTLAUB'S GULL | Chroicocephalus hartlaubii (Larus hartlaubii)

**RE Simmons** 

Reviewed by: J Kemper; H Kolberg; AJ Williams



Conservation Status:	Vulnerable
Southern African Range:	Coasts of central and southern Namibia, western and south-western South Africa
Area of Occupancy:	18,000 km <sup>2</sup>
Population Estimate:	4,000 birds
Population Trend:	Stable to increasing
Habitat:	Coastal bays, river mouths, near-shore islands
Threats:	Few breeding sites, low breeding success, disturbance, global warming

#### DISTRIBUTION AND ABUNDANCE

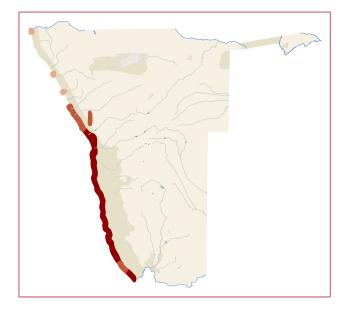
This small coastal gull is endemic to southern Africa with a highly restricted range along the south-western coast. It occurs along the coastline of central to south Namibia and south-western South Africa (Crawford 1997c) and its southern African population numbers between 7.000 and 12,000 pairs from 58 different localities (Williams et al. 1990b, du Toit et al. 2003, Hockey & Crawford 2005, Kemper et al. 2007b). It is rarely found farther north than Cape Cross, and like many other shorebirds, it is generally more common in the central regions of Walvis Bay and Sandwich Harbour (Crawford 1997c) than elsewhere in Namibia. In the southern coastal areas of Namibia, it is only common in the bays and islands around Lüderitz (Simmons et al. 1998a, MFMR unpubl. data) and the Orange River mouth (Crawford 1997c, H Kolberg unpubl. data). Analysis of counts from coastal wetland monitoring over 22 years (1990 to 2012) reveals that an average of 4,000 birds occur regularly in Namibia at 48 different sites from the Kunene River mouth to the Orange River mouth (H Kolberg unpubl. data). A maximum count of 3,650 birds was recorded in February 2008 at the Swakopmund Sewage Works, which is monitored monthly (S Dantu, M Boorman, H Kolberg unpubl. data); altogether 2,577 birds were counted three months later, in May 2008, on Penguin Island near Lüderitz Harbour (J Kemper unpubl. data). Given the mobile nature of the species, it is possible that these were the same birds.

It occupies an area of 18,000 km<sup>2</sup> (Jarvis *et al.* 2001), most of which occurs within protected areas such as the Dorob, Namib-Naukluft and Tsau//Khaeb (Sperrgebiet) national parks, and the Namibian Islands' Marine Protected Area. This gull probably bred only on islands and inaccessible areas of the Namib Desert prior to the establishment of human settlements. Presently, it is also found at the Mile 4 (Swakopmund) and Walvis Bay salt works, occasionally at sewage works, and the harbour and fishing factories at Lüderitz (T Hall, J Kemper pers. obs.). Inland breeding (approximately 25 km to 30 km from the coast) in the Namib Desert has been reported once south of Sandwich Harbour (M Seely pers. obs.).



### ECOLOGY

Like other coastal Larids, this species is most frequently found in small to large flocks, in natural and artificial habitats such as islands, coastal pans, estuaries, salt works and harbours. Most breeding occurs on islands (MFMR unpubl. data); birds are rarely found breeding far inland (Williams *et al.* 1990b). Nests are built on the ground, and clutches of one to three eggs (typically two; 75% of clutches and four records of four-egg clutches) are laid



(n=1,104), with one to two young reared (Jarvis et al. 2001, Brown et al. 2015). Breeding activities may be disrupted, and nesting birds even displaced by Great Crested Terns (Swift Terns) Thalasseus bergii (Sterna bergii) with which it often forms mixed colonies, and to which it is subordinate (J Kemper, AJ Williams pers. comm.). The average number of nests in a breeding colony is 250 (n=37). Breeding site fidelity is low and high inter-annual fluctuations in numbers of breeding pairs suggest that birds only breed when conditions are suitable (Crawford & Underhill 2003, Kemper 2007, MFMR unpubl. data). Lüderitz Harbour used to support the largest colonies; 1,000 pairs were observed breeding there in May 1977 and 601 pairs in April 1994 (T Hall unpubl. data). The expansion of the harbour in the late 1990s, associated disturbance from increased harbour activities, and an explosion of a feral cat population around the harbour displaced the colonies at Lüderitz Harbour and Shark Island in the late 1990s; these birds now appear to breed on nearby Seal, Penguin and Halifax islands (Kemper 2007). Other colonies occur at the Mile 4 and Walvis Bay salt works, the Walvis Bay Sewage Works and some of the other islands, particularly Mercury, Ichaboe and Possession islands (Kemper 2007). The breeding season is poorly defined and opportunistic, but with 87% of egg-laying taking place from January to May (n=60 records and about 7,600 nests: Brown et al. 2015. Breeding success is largely unquantified but appears to be generally low (Williams et al. 1990b).

The Hartlaub's Gull's foraging habitat is generally associated with kelp, where it feeds on the invertebrates that are abundant there (Ryan 1987a). Crawford (1997c) suggested that this association may explain its pattern of distribution in southern Africa but this fails to explain the lack of birds in areas north of Cape Cross where kelp is abundant (Tarr *et al.* 1985). It also feeds on a range of invertebrates and small fish in the intertidal zone and in protected bays, scavenges fish scraps from feeding Cape Fur Seals *Arctocephalus pusillus pusillus* and from fishing factory outflows. It occasionally launches kleptoparasitic attacks on conspecifics, terns and cormorants.

# 

The relatively few breeding sites and apparent lack of breeding success puts it at some risk. Terrestrial predators, including feral cats and dogs, as well as human disturbance, pose a risk to nesting gulls and are likely to curtail breeding success at breeding sites associated with human settlements. Global warming may change upwelling patterns and the frequency and intensity of Benguela Niño events, putting several coastal species at risk (du Toit et al. 2003, Roux 2003), but there are no obvious effects on Hartlaub's Gulls to date. Interbreeding with the closely related Grey-headed Gull C. cirrocephalus (Larus cirrocephalus), which occurs in relatively small numbers in Namibia, is more of a genetic curiosity than a threat to the genetic integrity of this species (Williams 1989). There are few other threats because, like many gulls, this species has benefited from man-made structures such as sewage works, and populations may be increasing.

# CONSERVATION STATUS

Although population trend analyses confirm a moderate increase in numbers in Namibia (Kolberg 2013c), this species is classified as *Vulnerable* (IUCN criterion B1a) because of its relatively small population of about 4,000 birds in Namibia, few known breeding sites and an area of occupancy of 18,000 km<sup>2</sup>. It is not classified as threatened either globally (IUCN 2012a), or in South Africa (Barnes 2000), where populations are much larger and numbers have increased in urban areas (Crawford & Underhill 2003, du Toit *et al.* 2003). It is included in Annex 2 of the Agreement on the Conservation of African-Eurasian Migratory Waterbirds (AEWA), and it is recommended that it is given *Specially Protected* status under Namibian Parks and Wildlife legislation.



A series of co-ordinated censuses at all breeding sites to assess breeding population sizes and concerted monitoring efforts of nests to assess breeding success in all colonies, particularly the larger colonies in southern Namibia, are required. Measures to improve breeding success, for example by limiting disturbance around breeding colonies, should be considered. Targeted ringing programmes could provide useful information on postfledging dispersal, site fidelity and breeding frequency.