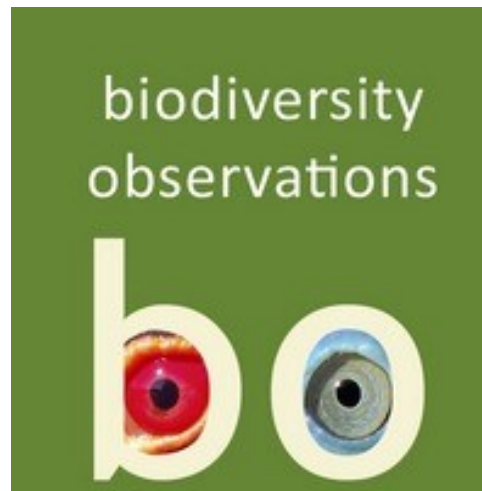


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The longest living gannet *Morus* spp. at Malgas Island, South Africa

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Abstract

A ringed Cape Gannet *Morus capensis* was retrapped on Malgas Island on 28 October 2020, having been ringed on 23 February 1983. The elapsed time was 37 years, 8 months and 4 days. It is not only the largest longevity for a Cape Gannet, it is the longest for any of the three gannet species.

Introduction

Under normal circumstances, the annual survival rates of gannets are of the order 0.95; as a result, the expected longevity of gannets globally is in the region of 17–22 years (Nelson 2010, Deakin 2019). The longevity record for a Northern Gannet *M. bassanus* is 37 years, 4 months and 16 days (Nelson 2010, British Trust for Ornithology 2024). Australasian Gannets *M. serrator* are known to have lived between 33 and 34 years (Del Hoyo et al. 1992). This note reports a

larger longevity for the Cape Gannet *Morus capensis* than those recorded for the other two gannet species.

Cape Gannets are endemic to the Benguela upwelling ecosystem of southern Africa, where they breed at six localities – three in Namibia and three in South Africa. Malgas Island (33°03'S, 17°55'E) lies at the northern entrance to Saldanha Bay, South Africa, and supports a colony of Cape Gannets (Figure 1) (Sherley et al. 2019). This colony has been studied since the early 1950s (Broekhuysen et al. 1961). In 1956, it was estimated to hold c. 25,000 breeding pairs; this had increased to more than 50,000 pairs in the mid-1990s but subsequently decreased to c. 20,000 pairs by 2018 (Sherley et al. 2019). The species is listed by the International Union for Conservation of Nature (IUCN) as Endangered on account of large decreases in its overall population at the six colonies since the mid-1960s (IUCN 2020).

Observation

A Cape Gannet ringed as a fledgling (SAFRING 928262) at Malgas Island on 23 February 1983 was retrapped there during a search for ringed birds on 28 October 2020. This was 37 years, 8 months and 4 days since banding and is the oldest longevity record for the species. The gannet would have been marginally older, if one considers that it would have hatched in December 1982. The previous longevity record for Cape Gannets was 30 years and 7 months (Hockey et al. 2005). The gannet was standing at the edge of a breeding area and flew off shortly after the number of the band was recorded. This bird has been resighted on one previous occasion, on 10 March 1992 (SAFRING unpubl. data).

Discussion

The large longevities of gannets accord with their large adult annual survival rates, which are estimated at c. 0.94 and c. 0.95 for Northern and Australasian Gannets, respectively (Del Hoyo et al. 1992); for Cape Gannets survival rates were estimated to be 0.83–0.90 during a period of gradually decreasing populations at three breeding colonies

(Distiller et al. 1992). The relatively large average survival rates for the three gannet species indicate that any large increases in mortality, even in a single year, will impact populations negatively; gannets ought thus to act to avert high mortality events. This was borne out in the behaviour of Cape Gannets; during their 2005/06 breeding season, the entire colony (c. 5,000 pairs) at Bird Island at Lambert's Bay abandoned that breeding event after several adults were killed in the colony by Cape Fur Seals *Arctocephalus pusillus pusillus* (Crawford et al. 2007). After similar attacks by seals, c. 10% of the colony at Malgas Island abandoned breeding in 2017/18 (Sherley et al. 2019). In both instances, birds returned to colonies over a period of years after removal of damage-causing seals (Sherley et al. 2019, BMD pers. obs). In periods of scarcity of preferred prey, Cape Gannets have low reproductive success and opt to buffer adult survival by feeding on poor quality prey such as offal discarded by demersal trawlers (Grémillet et al. 2008, Crawford et al. 2014).

Management interventions have assisted in maintaining high adult survival of Cape Gannets as well as recruitment processes. For example, gannets cleaned and released back to the wild after being oiled in spills had similar adult survival to un-oiled birds (Altwegg et al. 2008). Also, Cape Gannets are susceptible to by-catch mortality on hook fisheries but the introduction of mitigation measures rapidly decreased the overall seabird by-catch in South Africa's pelagic longline fishery to less than the target threshold of 0.05 birds.1,000 hooks⁻¹.(Rollinson et al. 2017). At Malgas Island, losses of Cape Gannet fledglings to Cape Fur Seals were shown to be unsustainable, but possible to decrease through the removal of damage-causing animals (Makhado et al. 2006, 2009).

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Figure 1: A view across part of the Cape Gannet colony at Malgas Island, 24 January 2017. Photograph: Bruce M Dyer.

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