

Predation of African Penguins by Cape Fur Seals at Dyer Island: implications for conservation

Azwianewi B. Makhado^{1,2}, Robert JM. Crawford^{1,2} and Les G Underhill²

¹*Department of Environmental Affairs and Tourism, Private Bag X2, Rogge Bay, 8012, Cape Town, South Africa*

²*Avian Demography Unit, University of Cape Town, Private Bag, Rondebosch, 7700, South Africa*

African Penguins (*Spheniscus demersus*) are endemic to southern Africa. The total population decreased by 90% in the 20th century. There was a large recent decrease at Dyer Island, from about 23 000 pairs in the late 1970s to about 2 000 pairs from 1997 onwards. Around Dyer Island, Cape Fur Seals (*Arctocephalus pusillus pusillus*) prey on African Penguins. Systematic observations were conducted from June–December 2004 to estimate the number of penguins killed by seals in this period. For days when no observations were made, data were imputed through interpolation. It was estimated that 300 adult penguins, about 7.5% of the population at the island, were killed by the seals. During 1994–1996, 7% of African Penguins were killed by seals annually¹. The present mortality attributable to seals is considered unsustainable. Total annual mortality of adult African Penguins is normally ca. 10–20%. Not all Cape Fur Seals kill seabirds. Predation by seals on seabirds in the Benguela system is almost wholly undertaken by subadult male seals of age between 2 to 8 years². It is anticipated that removal of the few seals that target seabirds will substantially reduce the mortality of penguins at the island, as this is a learned behaviour. Research at Malgas Island has indicated that the removal of “problem” seals can substantially reduce mortality. Fur seals, mainly *A. gazella*, also kill seabirds at Marion Island. Preliminary observations have indicated that the seals feeding on seabirds are males, often older than those causing the mortality in South Africa.

1. Marks *et al.* Cape Fur Seal (*Arctophalus pusillus pusillus*) predation on Cape Cormorants (*Phalacrocorax capensis*) and other birds at Dyer Island, South Africa. *Marine Ornithology* **25**, 9-12 (1997).
2. David *et al.* Assessing conservation priorities in the Benguela ecosystem, South Africa: analysing predation by seals on threatened seabirds. *Biol. Conserv.* **114**, 289-292. (2003).