

Chapter 44

Collation of training inputs undertaken within the BCLME Top Predators Project

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Introduction

The training and mentoring of “early-career” scientists was seen as a crucial component of the BCLME Top Predators Project. This was achieved through a variety of processes, both formal and informal. Informal mentoring consists of providing a full range of experiences relevant to taking a lead role in similar projects in the future. In this document, we collate the more formal and more easily quantified aspects of training.

We defined “early career” scientists as young scientists near the start of their careers. We selected the scientists in this category who participated in the project to be the recipients of capacity building initiatives within its framework. Seven early career scientists were trained as part of this project; details of their achievements are listed below. Two students received BCLME bursaries, and five were supported by the BCLME to attend international conferences and present research at these conferences relevant to the objectives of this project. Six of the seven persons were registered for postgraduate degrees during the lifetime of the project, five of these within the Avian Demography Unit at the University of Cape Town. In addition, 13 persons participated in a Time Series Workshop at Lüderitz from 24–26 May 2005 (Kemper 2007).

MARTA DE PONTE MACHADO

BCLME bursary, 2005: Ph.D., in progress:
de Ponte Machado M Study of Great White Pelicans in southern Africa: feeding ecology, predation, migration and conservation. Ph.D., University of Cape Town.

Conference Presentations

Twelfth Southern African Marine Science Symposium, Durban, July 2005

- **de Ponte Machado M** 2005. How many pelicans are too many? A conservation dilemma in the Western Cape, South Africa. (Oral presentation)

21st Annual Meeting of the Society for Conservation Biology, Port Elizabeth, July 2007

- **de Ponte Machado M, Mwema MM, Pichegru L** 2007. Great White Pelican (*Pelecanus onocrotalus*) predation on South African west coast islands and its impact on seabird populations. (Oral presentation)

- **Mwema MM, Ryan PG, de Ponte Machado M** 2007. Effects of Great White Pelican predation on threatened seabird species. (Poster)

BENEDICTUS L DUNDEE

M.Sc. completed:

Dundee BL 2006. Diet and foraging ranges of decreasing Cape Gannet populations in Namibia.

Conference Presentation

XXIV International Ornithological Congress, Hamburg, Germany, August 2006

- **Crawford RJM, Dundee BL** 2006. Managing responses of four seabirds to large changes in the abundance of Sardine and Anchovy in the Benguela upwelling system. (Oral presentation)

JESSICA KEMPER

Ph.D. completed:

Kemper J 2006. Heading towards extinction? Demography of the African Penguin in Namibia. Ph.D., University of Cape Town

Conference Presentations

Fifth International Penguin Conference, Ushuaia, Tierra del Fuego, Argentina, September 2004

- **Kemper J, Roux J-P, Barlett PA, Chesselet YJ, Jones R** 2004. Population size, recent trends and conservation status of the African Penguin (*Spheniscus demersus*) in Namibia? (Poster)
- **Kemper J, Roux J-P, Underhill LG** 2004. Breeding in bins: do artificial burrows improve breeding success of African Penguins (*Spheniscus demersus*) on Halifax Island, Namibia? (Oral presentation)

Sixth International Penguin Conference, Hobart, Tasmania, Australia, September 2007

- **Kemper J, Underhill LG, Roux J-P, Barlett PA, Chesselet YJ, James JAC, Jones R, Uhongora N-N, Wepener S** 2007. When to breed? Breeding success in relation to egg-laying date at four African Penguin breeding localities in Namibia.

- **Kemper J, Roux J-P, Underhill LG** 2007 What's age got to do with it? Patterns of moult seasonality of African Penguins in Namibia.

Journal papers

- **Kemper J, Underhill LG, Roux J-P, Bartlett PA, Chesselet YJ, James JAC, Jones R, Uhongora NN, Wepener S** *submitted*. Breeding patterns and factors influencing breeding success of African Penguins *Spheniscus demersus* in Namibia.
- **Kemper J, Underhill LG, Roux, J-P** *submitted*. Artificial burrows for African Penguins at Halifax Island, Namibia: do they improve breeding success?
- **Kemper J, Roux J-P, Bartlett PA, Chesselet YJ, Delport A, James JAC, Jones R, Peard KR, Underhill LG, Uhongora NN, Wepener S** *submitted*. The African Penguin *Spheniscus demersus* in Namibia: population estimates, trends, recruitment, adult survival and age structure from molt and nest counts.
- **Kemper J, Roux J-P, Underhill LG** *in press*. Effect of age and breeding status on moult phenology of adult African Penguins *Spheniscus demersus* in Namibia. *Auk*.

STEVE P KIRKMAN

Ph.D. in progress

Kirkman, SP Cape Fur Seals as bio-indicators of change in the Benguela Upwelling System. Ph.D., University of Cape Town.

Conference Presentations

Twelfth Southern African Marine Science Symposium, Durban, July 2005

- **Mauritzen M, Drapeau L, Bjørge A, Kirkman SP, Mejer M, Olsen E, Oosthuizen, Roux J-P** 2005. Foraging behaviour by Cape Fur Seals along the Namibian coast. (Poster)
- **Olsen E, Bjørge A, Drapeau L, Kirkman SP, Kotze D, Mauritzen M, Mejer M, Mukapuli N, Oosthuizen, Reynolds D, Swanson S** 2005. Foraging behaviour by Cape Fur Seals along the South African coast. (Poster)

International Conference on the Humboldt Current System: Climate, Ocean Dynamics, Ecosystem Processes, and Fisheries, November–December 2006

- **Kirkman SP, Oosthuizen WH, Mejer MA, Kotze PGH, Reynolds D, Underhill LG** 2006. Trends in distribution and abundance of the Cape Fur Seal *Arctocephalus p. pusillus*, based on aerial censuses of pup abundance (1972–2004). (Poster)
- **Kirkman SP, Oosthuizen WH, Mejer MA, Kotze PGH, Boucher M** 2006. Cape Fur Seal *Arctocephalus p. pusillus* diet: long term patterns. (Poster)

17th Biennial Conference on the Biology of Marine Mammals, Cape Town, South Africa, December 2007

- **Kirkman SP, Oosthuizen H, Mejer M, Kotze D, Roux J-P, Underhill LG** 2007. Making sense out of censuses – trends in pup counts of the Cape fur seal population over 30 years (and how to deal with missing data). International Marine Mammal Conference, Cape Town, South Africa.
- **Mauritzen M, Kirkman SP, Olsen E, Bjørge A, Drapeau L, Mejer M, Mukapuli N, Oosthuizen H, Roux J-P**. Variation in Cape fur seal foraging behaviour reflects large-scale ecosystem changes.

- **Mejer M, Kirkman SP, Drapeau L, Bjørge A, Mauritzen M, Olsen E, Oosthuizen H, Roux J-P**. A fresh look at fishing fleets vs Cape fur seals in South Africa: measuring co-occurrence at sea using vessel monitoring system and Argos seal tracking data.
- **Mecenero S, Krakstad J-O, Underhill LG, Kirkman SP, Roux J-P** 2007 Can seal diet contribute towards fisheries management?
- **Drapeau L, Olsen E, Bjørge A, Kirkman SP, Mauritzen M, Mejer M, Mukapuli N, Olsen E, Oosthuizen H, Roux J-P**. Environmental characterization of the Cape Fur Seals foraging grounds, relative to conditions in Southern Benguela ecosystem.
- **Olsen E, Bjørge A, Drapeau L, Kirkman SP, Mauritzen M, Mejer M, Mukapuli N, Oosthuizen H, Roux J-P**. Spatial and temporal variation in foraging behaviour of Cape fur seals (*Arctocephalus pusillus pusillus*) at four colonies in South Africa.
- **Stevens VE, Oosthuizen H, Mejer M, Kotze D, Makhado, A, Kirkman, SP**. Separating seals and seabirds: an electrified game fence to prevent Cape Fur Seals (*Arctocephalus pusillus pusillus*) from disturbing breeding seabirds?

Journal papers

- **Kirkman SP, Oosthuizen WH, Mejer MA, Kotze PGH, Roux J-P, Underhill LG** 2007. Making sense of censuses – dealing with missing data: trends in pup counts of Cape Fur Seals *Arctocephalus pusillus pusillus* for the period 1972–2004. *African Journal of Marine Science* 29.

NEWI MAKHADO

Ph.D. in progress

Makhado, Newi Investigation of the impact of fur seals on the conservation status of seabirds in the Prince Edward Islands and off western South Africa. Ph.D., University of Cape Town.

Conference Presentations

Twelfth Southern African Marine Science Symposium, Durban, South Africa, July 2005

- **Makhado AB, Crawford RJM, Underhill LG, Bester MN** 2005. Predation of seabirds by seals at Dyer Island in 2004: implications for conservation. (Poster)

XXIV International Ornithological Congress, Hamburg, Germany, August 2006

- **Makhado AB, Crawford RJM, Underhill LG** 2006. The impact of seal predation on Cape Gannets at Malgas Island, South Africa. Abstract, *Journal of Ornithology* (2006) 147 Supplement: 206. (Poster)

Sixth International Penguin Conference, Hobart, Australia, September, 2007

- **Makhado AB, Crawford RJM, Underhill LG** 2007. Predation of African Penguins *Spheniscus demersus* by Cape Fur Seals *Arctocephalus pusillus pusillus* at Dyer Island, South Africa: implications for conservation.

17th Biennial Conference on the Biology of Marine Mammals, Cape Town, South Africa, December 2007

- **Makhado AB, Crawford RJM, Underhill LG** 2007. Impact of predation by Cape Fur Seals *Arctocephalus pusillus* on Cape Gannets *Morus capensis* at Malgas Island, Western Cape, South Africa.

Journal papers

- **Makhado AB, Crawford RJM, Underhill LG** 2006. Impact of predation by Cape Fur Seals *Arctocephalus pusillus* on Cape Gannets *Morus capensis* at Malgas Island, Western Cape, South Africa. *African Journal of Marine Science* 28: 681–687.

MICHEL MORAIS

Conference Presentation

XXIV International Ornithological Congress. Hamburg, Germany, August 2006

- **Morais M, Roux J-P** 2006. Environmental determinants of seabird distribution at sea off Angola in late winter. (Poster)

MDU SEAKAMELA

BCLME bursary, 2007. M.Sc., in progress
Seakamela, M Trends in pup production and social structure of southern Africa's seal population – effects of changes in census methodology and population management. M.Sc., University of Cape Town.

REFERENCE

Kemper J (2007) Time Series Analysis Course, 24–26 May 2005, Lüderitz, Namibia. In: Kirkman SP (ed.) *Final Report of BCLME (Benguela Current Large Marine Ecosystem) Project on Top Predators as Biological Indicators of Ecosystem Change in the BCLME*. Avian Demography Unit, Cape Town.