

die wondere van ons natuur te leer verstaan. Die wetenskap het 'n voortdurende kontak oor die landsgrense nodig sowel deur geskifte as deur persoonlike ontmoeting. Ek wil die outoriteite dankie sê vir die ruim geleentheid wat ons in hierdie opsigte in ons antarktiese navorsing gebied word.

Monsieur Le Président c'est la coopération avec nos collègues dans les autres pays de SCAR qui est de très grande importance pour nous. Je pense à nos amis et

confrères de l'Angleterre, des Etats-Unis et de tous les autres pays, mais surtout aux savants français avec lesquels nous avons une relation très cordiale. Il me donne une grande satisfaction d'exprimer ici mes remerciements profonds pour le transport de notre équipe scientifique à l'île de Marion, île qui est nommé, comme beaucoup des îles dans l'océan du sud d'après son explorateur français.

Baie dankie Meneer die President.

NUWE BOEKE - NEW BOOKS

Dr. C. v. d. M. Brink, President van die WNNR, oorhandig 'n eksemplaar van die boek Marion and Prince Edward Islands aan mnr. B. J. Schoeman, Minister van Vervoer. Die boek bevat 'n verslag oor die Suid-Afrikaanse biologiese en geologiese ekspedisie na die twee eilande gedurende 1965 en 1966. Die Departement van Vervoer sorg vir die finansiering en die logistiek van die land se wetenskaplike ekspedisies na Antarktika en die Suidpoolgebiede. Die WNNR is Suid-Afrika se lidorganisasie in die Internasionale Wetenskaplike Komitee vir Antarktiese Navorsing (Scientific Committee for Antarctic Research - SCAR). As sulks tree die WNNR op as adviseur oor die Antarktiese navorsingsprogram waarvan die betrokke ekspedisie deel was. Dr. F. J. Hewitt, Adjunk-president van die WNNR, is ook voorsitter van die S.A. Wetenskaplike Komitee vir Antarktiese Navorsing wat verantwoordelik is vir die wetenskaplike beplanning van Suid-Afrika se Antarktiese navorsing.



MARION EN PRINCE EDWARD EILANDE

'n Prag-uitgawe oor die biologie en die geologie van die Suid-Afrikaanse eilande, Marion en Prince Edward, het pas verskyn. Hierdie twee eilande is van die min plekke op aarde wat nog nie deur die mens bederf is nie.

In 1965/1966 het die Suid-Afrikaanse Wetenskaplike Komitee vir Antarktiese Navorsing (WKAN) 'n ekspedisie daarheen gestuur onder leiding van prof. E. M. van Zinderen Bakker, die bekende paleoëkoloog van die Universiteit van die Oranje-Vrystaat. Hierdie eerste ekspedisie het hoofsaaklik die geologie en die biologie van dié interessante sub-antarktiese eilande bestudeer. 'n Omvattende monografie oor dié werk is pas gepubliseer.

Ryklik geïllustreerd

Die ryklik geïllustreerde werk is geredigeer deur E. M. van Zinderen Bakker, J. M. Winterbottom en R. A. Dyer. 'n Groep van 40 wetenskaplikes uit verskillende lande het gehelp met die verwerking van die waarnemings wat deur die ses ekspedisielede gemaak is. Eksemplare van die boek is onlangs oorhandig aan die Minister van Vervoer, mnr. B. J. Schoeman, en ander hooggeplaastes van die Departement wat verantwoordelik is vir die finansiering en

logistiek van Suid-Afrika se wetenskaplike ekspedisies na Antarktika en die Suidpoolgebied.

Die eerste en belangrikste oogmerk van die ekspedisie was om die fisiese en biologiese aard van die eilande te bepaal, skryf prof. Van Zinderen Bakker in sy inleiding tot die monografie. Hoewel sekere gegewens reeds ingesamel is deur vroeëre wetenskaplike besoekers aan die eilande, was die twee eilande, veral Prince Edward, tot 1965 toe nog feitlik onbekend aan die wetenskaplike wêreld.

Hierdie taak is afgehandel deur die ekspedisielede en die groot aantal kollegas uit ander lidlande van die Antarktiese Verdrag wat met die verwerking gehelp het. So is 'n belangrike leemte in die kennis van die sub-antarktiese gebied aangevul.

Hopelik, sê prof. Van Zinderen Bakker verder, sal die resultate van die Suid-Afrikaanse ekspedisie verdere navorsing op hierdie eilande stimuleer en dalk lei tot die vestiging van 'n moderne navorsingstasie op Marion sodat wetenskaplikes van verskillende lande 'n bydrae kan maak tot die kennis oor hierdie twee ongeskonde eilande. Soortgelyke stasies bestaan reeds op ander eilande in die Antarktiese gebied onder beskerming van die Britse, Australiese en Nieu-Seelandse regerings.

Scientiae Desember 1971.

MARION AND PRINCE EDWARD ISLANDS

A monograph on the 1965/66 South African expedition to these islands.

Editorial Committee: Dr. R. A. Dyer, Prof. J. M. Winterbottom and Prof. E. M. van Zinderen Bakker. Publishers: A. A. Balkema, 93 Keerom Street, Cape Town, South Africa. Price R22,50.

An expedition financed by the South African Government, was made to these sub-Antarctic Islands in 1965/66. A small team of geologists and biologists stayed on the islands for three and fifteen months respectively and collected as many data as possible. Marion and Prince Edward islands were previously little known to science and the results obtained by the expedition have revealed important information on the origin, the age and the geological history of these islands and on their flora and fauna.

Accurate maps of the islands have been drawn and their volcanic origin has been studied in detail. The glacial history gives valuable information on the world-wide lowering in temperature that occurred during the Würm-Wisconsin ice age and also on the age of the animal and plant life. The biological work, which was primarily concerned with taxonomic studies, is important for the understanding of the dispersal problems in the sub-Antarctic region, while extensive botanical investigations have given an insight into the ecology of the vegetation which is poor in species.

The general survey of the avifauna of these bird paradises is of great value, as the islands are completely protected. For instance, an analysis of the behaviour of the Gentoos penguin has provided a great many new details of the life of this bird species.

Many specialists have been working on the material collected by the expedition. The data on some of the groups such as the fresh water algae, the lichens, and diatoms have not yet been analysed, and some collections are still awaiting attention. This monograph covers the first stage of the biological-geological investigations of these islands.

The book contains 496 pages, 153 figures, 89 black and white photographs and 25 colour plates.

The list of contents is as follows:

Foreword: F. J. Hewitt.

The South African Biological and Geological Expedition: E. M. van Zinderen Bakker Sr.

Introduction: E. M. van Zinderen Bakker Sr.

PART I: GENERAL

1. *The climate of Marion Island*, B. R. Schulze.
2. *Topographic survey*, O. Langenegger and W. J. Verwoerd.
3. *Geology*, W. J. Verwoerd.

4. *Palaeomagnetic study of some recent lavas*, C. Snape and J. A. Retief.
5. *Geochronology*, Ian McDougall.
6. *Geochemical features of lavas*, E. J. D. Kable, A. J. Erlank and R. D. Cherry.
7. *History of the vegetation*, H. J. W. G. Schalke and E. M. van Zinderen Bakker Sr.
8. *Vegetation*, B. J. Huntley.
9. *Comparative avian ecology*, E. M. van Zinderen Bakker Jr.

PART II: BIOGEOGRAPHY AND SYSTEMATICS – BOTANY

10. *Musci*, B. O. van Zanten.
11. *Hepaticopsida*, R. Grolle.
12. *Preliminary microbiological studies*, J. J. Joubert.

PART III: BIOGEOGRAPHY AND SYSTEMATICS – ZOOLOGY

13. *The position of Marion Island in the sub-Antarctic avifauna*, J. M. Winterbottom.
14. *Birds observed at sea between Prince Edward Island and Cape Town*, E. M. van Zinderen Bakker Jr.
15. *Behaviour analysis of the Gentoos penguin (Pygoscelis papua Forster)*, E. M. van Zinderen Bakker Jr.
16. *The genus Diomedea*, E. M. van Zinderen Bakker Jr.
17. *Pisces*, A. P. Andriashev.
18. *Echinodermata*, I. Bernasconi.
19. *Holothuroidea*, D. L. Pawson.
20. *Mollusca*, J. M. Gaillard.
21. *Araneida*, R. F. Lawrence.
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23. *Ixodoidea*, Gertrud Theiler.
24. *Insecta*, Ph. Dreux.
25. *Diptera*, E. Séguéy.
26. *Lepidoptera*, L. Vari.
27. *Curculionidae*, G. Kuschel.
28. *Mallophaga*, K. C. Emerson.
29. *Entomostraca*, W. A. Smith and R. L. Sayers.
30. *Tigriopus angulatus Lang*, J. R. Grindley.
31. *Isopoda*, J. J. Cléret.
32. *Polychaeta*, J. H. Day.
33. *Oligochaeta*, R. W. Sims.
34. *Hirudinea*, R. Ph. Dollfus.
35. *Hydrozoa*, N. A. H. Millard.
36. *Actinaria*, Ch. E. Cutress.
37. *Rhizopoda*, Th. Grospietsch.

Topographical and Geological Maps of Marion and Prince Edward Islands.

Scientiae December 1971.

RSA'S BLEAK YEARS IN THE FROZEN SOUTH

THE ETERNAL ICE, by Captain Kenneth McNish

Cape Town: Tafelberg

RSA, South Africa's hardy little ice-breaker, left on her maiden voyage to Antarctica in January, 1961. Two months later the ship was beset. Ice threatened to crack her bright red hull or imprison her for a full Antarctic winter.

RSA survived. She returned recently from her 11th voyage to SANAE – South Africa's base on the international continent. Captain McNish is still in command.

RSA operates beyond the reach of normal rescue. She must make her own way to Tristan da Cunha, Gough Island, Marion Island and, each January, to the ice.

When the ice closed in during March, 1961, the nearest help was in New Zealand – the American ice-breaker *Glacier*. It would have taken a month to reach the *RSA*.

Captain McNish tells of the endless days, running the ship back and forth across small pools of open water surrounded by ice, unable to break out. Each day brings winter a little closer.

The story begins with the building of the *RSA* in Japan and her maiden voyage to Cape Town.

Loading delays follow and the ship steams south in terrible weather. Petrol drums secured to the foredeck break loose night after night. Deck-hands, officers and scientists battle waist deep in icy water to secure the rampaging drums.

Unloading on to the ice shelf is no less laborious. The ship must make her own moorings and unload with her own cranes. Tractors and men can easily be lost in a few kilometres.

A new base is built: a series of pockets linked by ice tunnels. Exhaust heat is used to turn snow into usable water.

Delays are the great danger. The Antarctic summer is brief. Work is not complete when the ice begins to seal off the channels to the north.

Trapped, the ship is carried back and forth in drifting ice. Eyes hunt for a "water sky" – the reflection of open sea on clouds. Young men face a second year away from home.

What happens is Captain McNish's story of the Eternal Ice.

– G.S.

Rand Daily Mail