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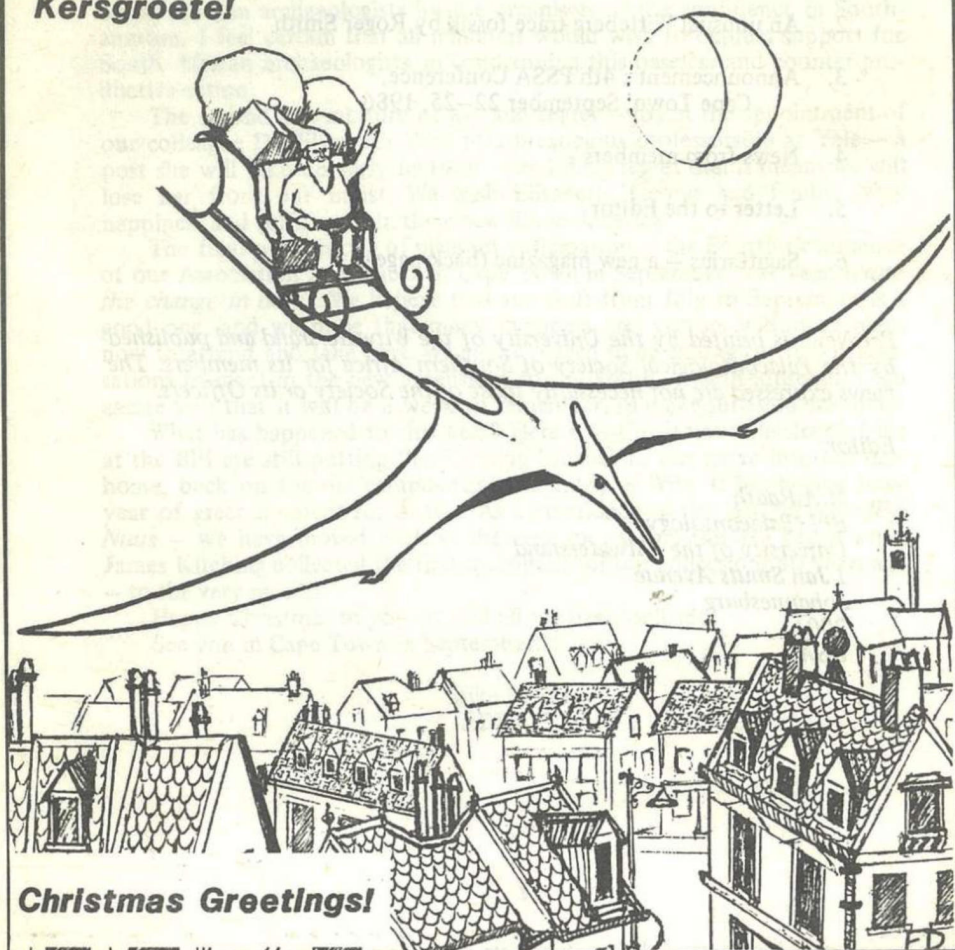
Biannual Newsletter of the Palaeontological Society of Southern Africa

Halfjaarlikse Nuusbrief van die Paleontologiese Vereniging van Suider Afrika

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Dec/Des 1985

Kersgroete!



Christmas Greetings!

PAL NEWS
PAL NUUS



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2001
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EDITORIAL

For the first time since I have been editor of *Pal News/Pal Nuus*, I have an abundance of material from members! Thank you! Not only is there a lot of it, but it also strikes me as particularly interesting. It indicates that palaeontology in this neck of the woods is alive and well. It is also a very pleasant note on which to end the year.

A few other points not specifically dealt with in reports from members bear noting, I think:

One is a matter for deep concern and regret — the academic boycott of South African archaeologists by the organisers of the conference in Southampton. I feel certain that all members would wish to express support for South African archaeologists in condemning this baseless and counter-productive action.

The second is a mixture of joy and regret — joy at the appointment of our colleague Dr. Elisabeth Vrba to a prestigious professorship at Yale — a post she will take up early in 1986 — and deep regret that it means we will lose her from our midst. We wish Elisabeth, George and family every happiness and fulfillment in their new life in America.

The final point is one of pleasant anticipation — the Fourth Conference of our Association to be held in Cape Town in September next year. (*Note the change in date*). We believe that the shift from July to September is a good one, and we hope that many members and visitors will make plans now to attend and take part. We are privileged to be among the first organisations to meet in the new extensions to the South African Museum. I can assure you that it will be a week to remember, so make sure you are there!

What has happened to this year? Here it is Christmas time already! We at the BPI are still putting the finishing touches to our move into our new home, back on the old campus (East Campus) of Wits. It has been a busy year of great moment for us too. As I mentioned in the last *Pal News/Pal Nuus* — we have moved back to the very spot where the BPI began when James Kitching collected the first specimens for our collections 40 years ago — to the very month!

Happy Christmas to you all, and all the best for 1986.

See you in Cape Town in September!

Mike Raath
EDITOR

AN UNUSUAL WITTEBERG TRACE FOSSIL

Some of you may remember the one day field excursion following the Stellenbosch palaeocongress. Burger Oelofsen led us to a Witteberg outcrop alongside the road between Villiersdorp and Worcester. Amongst the abundant bedding plane exposures of *Zoophycos* I picked up this interesting little trace fossil. It is a hyporelief of a small burrow system probably made by a soft bodied organism. The fossil closely resembles *Lophoctenium* (Seilacher, A. 1960. *Geol. Rundschau* v. 49 p.) and possibly reflects a feeding behaviour (fodinichnia). I would be interested to find out if this trace fossil has been recorded from other Witteberg outcrops or any other rock succession in South Africa.

ROGER SMITH

South African Museum, Cape Town.

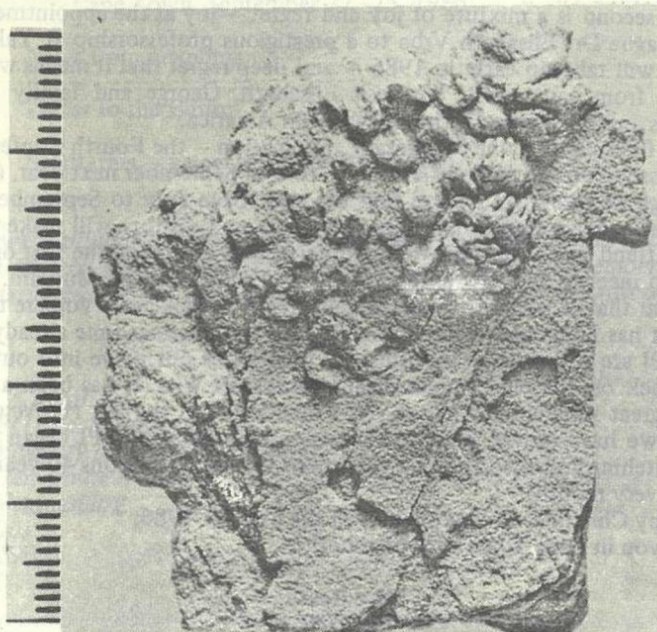


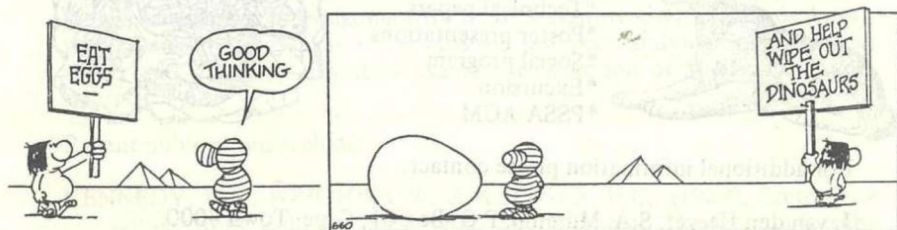
Fig. 1 *Lophoctenium* preserved as hypichnial trace on a bedding plane of horizontally laminated fine-grained sandstone from the lower Witteberg Group (Late Devonian) of Western Cape. Scale in mm.



Fig. 2 Close up of *Lophoctenium* showing the characteristic "feathering" of short burrows off one side of the main burrow.

KING TUTT

by Gim



Announcement!

Announcing the 4th biennial conference

of the

PALAEONTOLOGICAL SOCIETY OF
SOUTHERN AFRICA

to be held at

THE SOUTH AFRICAN MUSEUM,
CAPE TOWN

from

22-25 September 1986

The South African Museum will host the 1986 PSSA Conference in the new museum building. Since 1982 extensive additions to the display and research sections of the museum have been in progress. These include a highly sophisticated planetarium and excellent conference facilities. Completion of the building is set for early 1986 after which the various departments will transfer their respective holdings to the new premises. This has necessitated the scheduling of the conference during the latter half of the year. An added advantage of this arrangement is that the conference excursion will not take place in the middle of the Cape winter!

Members of the PSSA are cordially invited to attend and participate in the conference which will be organised around a number of themes.

Sessions will include:



- *Review papers
- *Research papers
- *Technical papers
- *Poster presentations
- *Social program
- *Excursion
- *PSSA AGM



For additional information please contact:

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Tel: (021) 24-3330

NEWS FROM MEMBERS

(Yippee! Your response has been great! Keep it up!)

South African Museum, Cape Town

As the long-awaited museum extensions near completion the research staff are becoming increasingly more involved in display-orientated activities. Nevertheless palaeontological research continues. News from the South African Museum has, in the past, been sporadic to say the least. This report should bring P.S.S.A. members up to date with our palaeontological activities over the past 2 years.

1. INVERTEBRATE PALAEOLOGY

Herbie Klinger – Current research topics

1. Systematic description of Cretaceous ammonites from Natal and Zululand.
2. A re-description of German type material (ammonites).
3. An investigation into the stratigraphic distribution of Inoceramid and Trigoniid bivalves.

Over the past two years Herbie made several trips to coastal exposures in Transkei, Zululand and Natal. The latest trip with Dr. W.J. Kennedy (Oxford) yielded over 900 kg of specimens including some interesting "bored woodground" and some large post-cranial bones of a Late Cretaceous dinosaur.

In August this year he attended the 2nd International Cephalopod Symposium in Tübingen. Future research projects include collecting heteromorph ammonites in Patagonia with Dr B.M. Aguirre Uretta (Buenos Aires), who spent several months at the Museum last year studying South African types, and a trip to Dijon to examine a collection of Madagascan type-material.

Recent publications include:

KENNEDY, W.J., WRIGHT, C.W. & KLINGER, H.C., (1983). Cretaceous faunas from Zululand and Natal, South Africa. The ammonite sub-family Barroisiceratinae Basse, 1947. *Ann. S. Afr. Mus.* 90: 241–324.

KLINGER, H.C. & KENNEDY, W.J., (1983). Cretaceous faunas from Zululand and Natal, South Africa. The ammonite subfamily Peroniceratinae Hyatt, 1900. *Ann. S. Afr. Mus.* 92: 113-294.

KLINGER, H.C., KAKABADZE, M.V. & KENNEDY, W.J., (1984). Upper Barremian (Cretaceous) heteroceratid ammonites from South Africa and the Caucasus and their palaeogeographic significance. *J. moll. Stud.* 50: 43-60.

KENNEDY, W.J. & KLINGER, H.C., (1985). Cretaceous faunas from Zululand and Natal, South Africa. The ammonite family Kossmaticeratidae Spath, 1922. *Ann. S. Afr. Mus.* 95: 165-231.

AGUIRRE URRETTA, M.B. & KLINGER, H.C., (1985). Upper Barremian Heteroceratinae (Cephalopoda: Ammonoidea) from Patagonia and Zululand, with comments on the systematics of the subfamily. *Ann. S. Afr. Mus.* (in press).

KLINGER, H.C., (1985). Upper Cretaceous Cephalopoda from offshore deposits on the Natal South Coast, South Africa. *Palaeontologia africana* 26 (1):1-12.

2. CENOZOIC PALAEONTOLOGY

Brett Hendey — current research

1. Fossil giraffes from Langebaanweg with special reference to the "palaeotraginae".
2. Description of *Kolpochoerus* (fossil pig) from Saldanha, in collaboration with Dr. H.B.S. Cooke (Vancouver).
3. Late Pleistocene sea-level changes on the Cape south coast, in collaboration with Dr. T.P. Volman (Cornell University).

Visitors to Brett's department over the past two years include Dr R G Klein and K Cruz-Urbe (University of Chicago) studying Late Quaternary mammals, Dr Alan Turner (Transvaal Museum) studying the carnivores in the collections, Dr John Harris (L.A. Country Museum) studying Langebaanweg giraffes and Dr Martin Pickford (Institute of Palaeontology, Paris) studying Miocene mammals.

In October this year the department mounted an exhibition at the Langebaan Expo explaining the geology of the region and the Langebaan-

weg fossils. Brett is also involved in the design of two new displays for the Museum: "The evolution of savannah mammals" (completed) and "West-coast palaeoenvironments" (in progress).

Heavily involved in museum-related activities, Brett is now the co-ordinator for Educational Services and a driving force behind the fund-raising and launching of the new museum magazine – *Sagittarius*.

Recent publications include:

HENDEY, Q.B., (1983). Cenozoic geology and palaeogeography of the fynbos region. In DEACON, H.J., HENDEY, Q.B. & LAMBRECHTS, J.J.N. eds. Fynbos palaeoecology: A preliminary synthesis. p 35–60. (*S. Afr. Natl. Sci. Prog. Rep. 75*).

HENDEY, Q.B., (1983). Palaeontology and palaeoecology of the fynbos region: An introduction. In: DEACON, H.J., HENDEY, Q.B. & LAMBRECHTS, J.J.N. eds. Fynbos palaeoecology: A preliminary synthesis, p. 87–99 (*S. Afr. Natl. Sci. Progr. Rep. 75*).

HENDEY, Q.B. (1983). Palaeoenvironmental implications of the late Tertiary vertebrate fauna of the fynbos region. In: DEACON, H.J., HENDEY, Q.B. & LAMBRECHTS, J.J.N. eds. Fynbos palaeoecology: A preliminary synthesis. p. 100–115 (*S. Afr. Natl. Progr. Rep. 75*).

DINGLE, R.V. & HENDEY, Q.B. (1984). Late Mesozoic Tertiary sediment supply to the eastern Cape Basin (S.E. Atlantic) and palaeo-drainage systems in southwestern Africa. *Marine Geology* 56: 13–26.

HENDEY, Q.B. (1984). Fossils from Langebaanweg. *Education and Culture* 7(1): 33–34.

HENDEY, Q.B. (1984). Southern African Late Tertiary vertebrates. In: KLEIN, R.G. (ed). *Southern African prehistory and palaeoenvironments* : 81–106. A.A. Balkema, Rotterdam.

HENDEY, Q.B. (1985). Lagoon's fossil record unparalleled in S.A. *Custos* 14 (7):26–29.

John Pether – joined the Museum early last year after finishing honours at U.C.T. Currently working on the stratigraphy, palaeontology and depositional environments of the West Coast onshore diamond deposits. In co-operation with mining companies, he has already spent several months in

the field logging detailed sections of "temporary" exposures within the active mining areas at Hondeklip Bay, and is feeling confident in his interpretation of various nearshore/lagoonal sub-environments of the overburden sequences. A manuscript is in preparation for the *Annals* on the sedimentology of these deposits.

Dr. Brian Kensley (Smithsonian), who visited the museum last year, discovered that 50% of the Hondeklip Bay invertebrate fossils are now extinct and managed to generate 21 new species of mollusc from John's collection.

To broaden his knowledge of nearshore environments and sedimentary processes John took part in the SEDPLETT workshop held at Plettenberg Bay earlier this year led by Professor Rust and Dr Reddering of University of Port Elizabeth. John and I attended a week-long lecture course held at U.C.T. on the mechanics of sediment movement by Dr J.B. Southard of Massachusetts Institute of Technology.

3. KAROO PALAEOONTOLOGY

Juri van den Heever — current research topics.

1. Comparative and functional anatomy of pristerognathids.
2. Volume dealing with therocephalians for *Encyclopaedia of Palaeoherpetology* (in collaboration with Prof. J. Hopson, University of Chicago).
3. A paper on *Owenetta* in collaboration with Dr R. Reisz (University of Toronto).
4. Description of a new small "prolacertiform" skull from Graaff Reinet with Dr S. Evans (Middlesex Hospital Medical School, London).

Over the past year Juri has been involved with a steady stream of visiting scientists working on the collections. More recently museum-related tasks such as translating, teaching and scripting new displays (including the information leaflets for a set of British Museum dinosaur and mammal models currently on sale in the museum shop) have taken up much of his time. Early this year we took time out to cast some therapsid trackways and collect pristerognathid fossil material suitable for studying the internal anatomy of the braincase.

Juri and Burger Oelofsen hope to work on the museum's specimen of *Plesiosaurus capensis* which contains one of the very few uncompressed plesiosaur braincases in the world. In the meantime Barney Newman constructed a full size fibre-glass reconstruction of this fossil for the new gallery.

Recent publications:

- RUBIDGE, B.S., KITCHING, J.W. & VAN DEN HEEVER, J.A. (1983). First record of a therocephalian (Therapsida: Pristerognathidae) from the Ecca of South Africa. *Navors. nas. Mus. Bloemfontein*, 4(10): 229-235.

Roger Smith — current research topics

1. Fluvial facies, vertebrate taphonomy and palaeosols of the Teekloof Formation, Lower Beaufort.
2. Sedimentation and palaeoenvironments of Late Cretaceous crater-lake deposits.

Since joining the South African Museum in October 1983, I've spent several months in the south-western Karoo collecting fossils, logging sections, mapping sandstone surfaces, logging palaeosol sequences and recording taphonomic data. The last trip, in September this year, yielded some interesting helical vertebrate burrows two of which are still occupied.

Last year four trips were made to Kimberley and Bostwana to log cores of Kimberlite epiclastic sequences containing fossiliferous Late Cretaceous crater-lake deposits. This work is continuing in collaboration with Anton Scholz (University of Stellenbosch) and Mike De Wit (De Beers Consolidated Mines).

The department is building a collection of Beaufort vertebrate trackways for research and display purposes. Of the 6 trackways mapped to date, 3 have been cast with a combination of latex and silicone rubber. Clive Booth is currently making fibre glass moulds of a 30 m² sandstone surface for use in the new Lower Beaufort habitat exhibit. Annelise Crean is preparing a spectacular *Pareiasuchus* skull with partial skeleton collected earlier this year.

In November we will spend a week in the Karoo National Park to locate and prepare *in situ* specimens in the hope of establishing a "fossil trail" for visitors.

Recent publications:

SMITH, R.M.H. (in press). Sedimentation and palaeoenvironments of Late Cretaceous crater-lake deposits in Bushmanland, South Africa. *Sedimentology*.

SMITH, R.M.H. (in press). Morphology and depositional history of exhumed Permian point bars in the south-western Karoo, South Africa. *Jour. Sed. Petrol.*

R.M.H. Smith

(Thank you, Roger, for filling in the rather large blank left by the SAM; we haven't had a report from you guys for ages! At last we know what you are all doing!).

Pippa Haarhoff (South African Museum, Cape Town).

In February this year, with the kind co-operation of Dick and Cynthia Dobrowsky, Vincent Bartnick and I exhumed 44 stinking Cape Vulture carcasses that had been buried ten months previously. They had been found poisoned on the Dobrowsky's farm near Elliot in the N.E. Cape. It was an unenviable task and, hopefully, with better communication with the Nature Conservation Department — should such a disaster happen again — the specimens will be handled by a museum immediately. The carcasses have since been macerated and all but a few remains are now clean and in the comparative collection. They will be useful for the taxonomic study of the fossil vulture remains from the early Pliocene site at Langebaanweg. However, our comparative collection is far from complete and if anyone has any ideas or contacts for collecting dead birds (bearing in mind that they don't have to be fresh), I'd appreciate it if they could contact me.

In July/August this year I spent seven weeks working with Professor Pierce Brodkorb (University of Florida) in Gainesville. We began taxonomic studies on two bird groups — the mousebirds (Coliidae) and the grebes (Podicepsidae) from Olduvai Gorge. On my return I spent some time at the Smithsonian Institute and the American Museum of Natural History, where I met some very stimulating people in the field of palaeornithology. I am most grateful to Professor Brodkorb for helping make this trip possible.

Recent Papers:

- Haarhoff, P.J. 1985. Upper Pleistocene Greater Flamingo (*Phoenicopterus ruber*) from South Africa. *Ostrich* 56: 207–209.
- Rich, P.V. & Haarhoff, P.J. 1985. Early Pliocene Coliidae (Aves, Coliiformes) from Langebaanweg, South Africa. *Ostrich* 56: 20–41.
- Haarhoff, P.J. & Prins, A.J. 1985. First record of the Bearded Ant for Zimbabwe. *The Honeyguide*. (in press).

B.W. Oelofsen (Dept. van Soölogie, Univ. Stellenbosch)

I The Second International Conference on Indo-Pacific Fishes 28 Julie – 4 Augustus 1985, Tokyo, Japan.

Die uitnodiging na die kongres is aan my gerig deur dr G. Dinker kus van die American Museum of Natural History, New York en dit het waarskynlik die deurslag gegee in die toekenning van 'n visum aan my. Dr Dinker kus is deur die organiseerders van die kongres genooi om as konvenor van die simposium oor Elasmobranchii op te tree. Die simposium het oor drie dae, in parallel met 'n Gobi, Cyclostomaat, larwale visse, reproduksie, chromosoom en algemene simposia verloop.

Ek het die kongres verlaat met twee groot indrukke, die eerste en sterkste is hoe dankbaar ons kan wees vir die goeie skoling wat ons in die gebruik van Engels kry. Die voertaal van die kongres was Engels en die arme oosterlinge ondervind groot probleme om te kommunikeer. Dit kan nog gaan solank die referate gelewer word, want dit word uit die hoof geleer, maar tydens vraetyd het die kommunikasie by meer as een geleentheid in duie gestort, ten spyte van die teenwoordigheid van tolke by elke sessie.

Die tweede indruk waarmee ek die kongres verlaat het is dat die viskundes van die Ooste in 'n beskrywende fase van studie is waaruit hulle baie traag is om te beweeg. Lang lyste van visse en verspreidings word geproduseer. Ek is nie naïef genoeg om dit nie na waarde te skat nie en besef terdeë dat die soort inligting die basis van enige sinvolle taksonomiese werk is en dat dit weer aan die basis van verdere sinteses lê. Ek sou egter graag wou sien dat pogings aangewend word om patrone van verspreiding te verklaar bv. aan die hand van paleoklimaat en/of geomorfologiese evolusie.

Die referaat wat ek gelewer het was getiteld "A fossil shark neurocranium from the Permo-Carboniferous (Lowermost Ecca Formations) of South Africa". Ek het die geleentheid gehad om die manuskrip met prof. Dick Lund van New York, 'n spesialis op fossiele haaie, te bespreek en later ook met dr Gavin Young van Australië. Die reaksie van beide navorsers, soos ook die geval was toe die referaat gelewer is, was baie gunstig. Die manuskrip is reeds deur referente beoordeel en is aanvaar vir publikasie. Die kommentaar van 'n

referent lees as volg, "A good paper that cannot be significantly shortened".

Die belangrikste enkele gevolgtrekking wat uit my referaat spruit en baie belangstelling gewek het is die feit dat hierdie haai uit die Karoo die sustergroep is van die laat-Kryt en moderne haaie. Alle ander bekende fossiele haaie is dus filogeneties verder van die moderne haaie af. Hoe verbaasend dit ookal mag klink dui dit egter daarop dat die ontwikkelingslyn wat deur hierdie haai uit die Prins Albert formasie, na die moderne haaie lei, al vir amper 300 miljoen jaar as 'n aparte ontwikkelingslyn bestaan.

Die ontvangs by die kongres was besonder gul, waarskynlik deels as gevolg van die feit dat die kongres onder beskerming van die kroonprins van Japan, prins Akihito, was.

II Na Kongres besoek aan die Nasionale Natuurhistoriese Museum van Japan

Na afloop van die kongres het ek twee dae spandeer aan die studie van eksemplare van Mesosauridae in dié museum. Die museum beskik oor die tipe eksemplaar van die Brasiliaanse fossiele reptielgenus *Brazilosaurus sanpauloensis* en het ek gevolglik geleentheid gehad om die enigste tipe eksemplaar van die Mesosauridae wat ek nog nie gesien het nie, te bestudeer.

III Besoek aan die Field Museum, Chicago

Met die goedgunstige toestemming van dr J. Bolt van die Field Museum het ek toegang gehad tot eksemplare van die vroeë stamreptiele (Cotylosauria) wat in die Field Museum versamelings is asook eksemplare van *Bolosaurus* wat in die Field Museum is op bruikleen van die American Museum in New York. Die skedel van *Bolosaurus* is beskryf met 'n enkele temporale venster laag af in the sywand van die skedel. Die vorm is die enigste van die aard en in die ontwikkeling van 'n hipotese oor die ontstaan van temporale vensters het dit 'n probleem geskep. My ondersoek het getoon dat die skedel nie 'n venster het nie, die interpretasie van Watson berus op 'n tafonomiese artifak.

IV Die "Sixth Gondwana Symposium". Ohio State University, Columbus Ohio; 18–23 Augustus 1985.

Die Gondwana kongresreeks is vir Suid-Afrika se geoloë en paleontoloë van besondere belang en die geleentheid om die simposium by te woon was besonder verrykend.

Volgens internasionale standaarde was dit 'n klein kongres met slegs ± 150 kongresgangers. 'n Wye reeks lande was egter verteenwoordig soos Indië, China, Thailand, Chili, Argentinië, Brazilië en self nie-Gondwana

lande uit Wes Europa soos Wes Duitsland, Frankryk, Denemarke en Noorweë. Uit Afrika was Suid Afrika met vier persone en Madagaskar en Egipte met een persoon elk, al deelnemers.

Die V S A, Kanada en Brittanje het die grootste groepe afgevaardigdes gehad wat natuurlik weer 'n refleksie is van die aansienlike belangstelling wat in die lande vir navorsing in Antarktika, heers.

Die sentrale posisie wat Suid Afrika in Gondwanaland ingeneem het en die hoë gehalte van die navorsing wat plaaslik gedoen word het die bydraes uit Suid Afrika 'n sentrale plek laat inneem. Na 'n referaat van prof. V. von Brunn van Pietermaritzburg het prof. John Crowell van Santa Barbara opgestaan en die opmerking gemaak dat dit die gehalte van werk is wat ook elders nodig is.

My eie referaat het baie belangstelling uitgelok veral aangesien my rekonstruksie van epikontinentale seë oor Suidelike Afrika en Suid Amerika baie goed inskakel met die "Polar Star" see wat Amerikaanse navorsers in die Elsworth gebied van Antarktika postuleer.

Die leier van 'n span wat in Antarktika op die Swartskalties gaan werk, M. Miller, het twee lang besprekingsessies met my gehad waarin ek die tektoniese raamwerk vir die vorming van die Whitehill en Irati komme moes verduidelik. Ek glo dat daar 'n sterk moontlikheid bestaan dat ek genooi kan word om tydens 'n volgende veldseisoen saam met die span na Antarktika te gaan en ek hou daarvoor albei my duime vas!!

Dit het duidelik op die kongres geblyk dat, hoewel ons kennis van Gondwanaland in die laaste dekades baie toegeneem het, ons nog baie te leer het. Die simplistiese beeld van 'n enorme superkontinent word verplaas deur die besef dat vlak seë en orogenetiese gordels die kontinent beïnvloed het en dat sedimente in verskillende komme wat oppervlakkig dieselfde lyk, diachroon mag wees.

Die Sondag voor die kongres het ek 'n veldekskursie in die Columbus omgewing meegemaak waartydens ons na die sedimentologiese fasies en fossiele van Karboon-ouderdom gesteentes gekyk het.

Ten slotte was die persoonlike kontak met ander navorsers op die kongresse en tydens my besoeke aan die museums weereens oneindig waardevol. So is ek voorlopig genooi na 'n kongres in Beijing (Peking) in 1986 deur dr Mee Mann Chang wat ek in 1982 in Stockholm leer ken het. Sy is nou direkteur van die Instituut vir Paleontologie en Antropologie in Beijing.

Ek het ook waardevolle kontakte opgebou met navorsers uit Brasilië bv. prof. Oscar Rösler. Waardevolle inligting word nou uitgeruil as 'n uitvloeisel hiervan.

Ek wil die Universiteit van Stellenbosch en die skenkers van die Boonstra-Beurs bedank vir finansiële ondersteuning. Die bydraes red my tydelik van bankrotskap want die buiteland het ontsettend duur geword. Toe ek van Hawaii af op Toronto land moes ek nog kaartjies koop vir die

vlugte na Chicago, Columbus en New York en tot my skok moes ek uitvind dat ek slegs daarvoor \$10 te min gehad het — en drie weke het nog voorgelê. Gelukkig — Goddank — is daar so iets soos Greyhoundbusse wat teen “bekostigbare” tariewe ry, en ek was gered.

Verder my dank aan Roy Oosthuizen vir die haaskedel waaroor my referaat gehandel het en ek is dankbaar dat die beskrywing nou eindelijk ten laaste in druk sal verskyn.

MARINE GEOSCIENCE UNIT, UNIVERSITY OF CAPE TOWN

Current Research

JODY FREWIN (University of the Western Cape) took several months study leave in the second half of 1985 to work full time at UCT to complete her M.Sc. on SA Palaeogene ostracods. At the time of writing the first draft of her thesis is almost complete and it should be ready for release as one of the GSO/UCT Marine Geoscience Unit Bulletins in the first quarter of 1986.

AMOS WINTER & MARK FINCHAM (MGU, UCT) are making good progress with their coccolithophore and oxygen isotope studies from MGU core material from the SW Indian Ocean. This work will provide invaluable information for our palaeo-oceanographic studies. In addition, Amos is preparing an atlas of modern coccolithophores from around southern Africa.

NED POKRAS (MGU, UCT) is working on the marine diatom floras from around southern Africa. In addition to a regional study of the SW Indian Ocean area, he will participate in our Walvis Bay programme where an attempt will be made to identify seasonal sedimentation events in boxed samples in the diatomaceous mud belt.

RICHARD DINGLE (MGU, UCT) is continuing his work on South African and Gondwanide Mesozoic ostracoda, and plans a study of the Recent and sub-Recent faunas from the continental shelf during his sabbatical leave in 1986.

Overseas travel

Amos Winter attended the International Nannoplankton Association Meeting in Vienna in September, where he presented a paper entitled “Distribution of coccolithophores at the water surface and sediment surface of the Southwest Indian Ocean”, by Winter, A., Fincham, M., & Friedinger, P.J.J. The following abstract was also presented during 1985:

“Diatom assemblages in laminated sequences from Walvis Bay, southwest Africa” by Pokras, E.M., & Winter A. Transactions of the American Geophysical Union.

Richard Dingle attended the 9th International Ostracod Symposium at Shizuka, Japan, in August, where he presented a paper entitled "Marine ostracod distributions during the early breakup of southern Gondwanaland". Prior to the symposium he participated in a field excursion in the Peoples Republic of China. The field party examined non-marine ostracod-bearing sediments near Fuxin (NW China), and had an opportunity to meet colleagues at the Geological Institute at Beijing

Visitors

Drs Boaz Luz and Johnathan Erez from the University of Jerusalem will visit the MGU in Jan-Feb 1986 to work with us on our isotope studies of marine sediments and sea water.

Publications

- Dingle, R.V. 1985. Turonian, Coniacian, and Santonian Ostracoda from south-east Africa. *Annals South African Museum*, 96: 123-239.
- Winter, A. 1985. Distribution of living coccolithophores in the California Current system, southern California Borderland, *Marine Micropalaeontology*, 9: 385-393.

R.J. Rayner (BPI - Palaeontology, Wits University)

HERE COMES THE SUN

The Vereeniging fossil plant localities were in the news this year. The highly scenic industrial wasteland of the north bank of the Vaal has become attractive to Southern Sun Ltd who plan to build a R50m hotel complex there.

Local councillors were alive to the problems of achieving a balance between development and conservation, and, through Mrs Deyzel of the Vereeniging City Museum, contacted the Bernard Price Institute for advice. There are large collections of Permian fossil plants from Vereeniging housed both in the B.P.I. and the Vereeniging City Museum. These specimens were collected chiefly by Leslie, le Roux, and more recently by Plumstead and her students. Amongst the material were the first finds of fruiting *Glossopteris* leaves which were described by Plumstead in the 1950's. The papers immediately caused a sensation in botanical circles, and the quarries have since been considered a type-site for *Glossopteris* fructifications.

The councillors are to be applauded for their concern, particularly E. Combrinck who was present as the Mayor of Vereeniging at the Gondwana Symposium excursion to the fossil sites. It was he who insisted on contacting a palaeontologist for a report on the status of the localities after seeing the plans for the hotel.

There was a flurry of interest from the press who were obviously aware of the financial importance of the development. Articles then appeared in both *Die Vaderland* and *The Vereeniging Star*. Due to the interest shown, the developers have been made aware of the significance of the sites, and the important localities are now safe. Visitors to the hotel may even be interested in the palaeontological history of the area. More important is that any excavations in the area will be monitored in case further productive beds are exposed. Watch this space for details.

NATIONAL MUSEUM, BLOEMFONTEIN

KAROO PALAEOONTOLOGY – Bruce Rubidge

During September 1985 I spent four weeks in the field north of Prince Albert collecting from exposures of the Waterford Formation (Upper Ecca). Most of my time was spent measuring up stratigraphic sections, while my assistant, John Nyaphuli, looked for fossils. Several good skulls of *Eodicynodon* were found, and one with quite a bit of postcranium too. This is only the second specimen of *Eodicynodon* found so far which has postcranial elements. More dinocephalian cranial bones and a possible therocephalian were also found.

So far I have measured four detailed stratigraphic sections through the Ecca-Beaufort transition zone at various localities between Rietbron and Prince Albert, and hopefully will shortly have a better idea of the geology and palaeoenvironment of the Upper Ecca and Lower Beaufort in the southern Karoo.

While in the Karoo I spent a few most instructive days in the field with Roger Smith in the Beaufort West district.

Paper published recently:

Rubidge, B.S. and Brink, J.S. (1985). Preliminary survey of the extent and nature of the Pleistocene sedimentary deposits at Florisbad, South Africa. *Navors. nas. Mus., Bloemfontein*, 5(5): 69–76.

RESEARCH AT FLORISBAD — J.S. Brink

The study of the two fossil mammal collections from the site is still in progress and has up to now produced interesting results regarding the nature of the ancient environment and the ecological niche of the Florisbad Middle Stone Age people.

Apart from the study of fossil mammals, the site is still being tested with the aim of obtaining a better understanding of its formation history and to locate the spring sediments.

Other research work at Florisbad consists of the following:

- A preliminary sediment study of borehole samples by Bruce Rubidge and James Brink (completed).
- A study of the regional geology by Prof. N.J. Grobler and Mr. J.C. Look.
- A restudy of the pollens by Prof. E.M. van Zinderen Bakker.
- A carbon isotope analysis of the teeth of two species of springbok from Florisbad by Julie Lee Thorpe.
- The study of the MSA artefacts from Florisbad by Kathy Kuman.

Heidi and John Anderson (Botanical Research Institute, Pretoria)

Current Research:

Vol 2 (Part 3) of the *Palaeoflora* which revises all the gymnosperms (excluding the genus *Dicroidium*) is underway and will be published in 1986.

Recent publications:

Palaeoflora of Southern Africa, Prodromus of South African Megaflores, Devonian — Cretaceous. A4, 423 pp. published June 1985 and available from A.A. Balkema Marketing, P. O. Box 317, Claremont 7735.

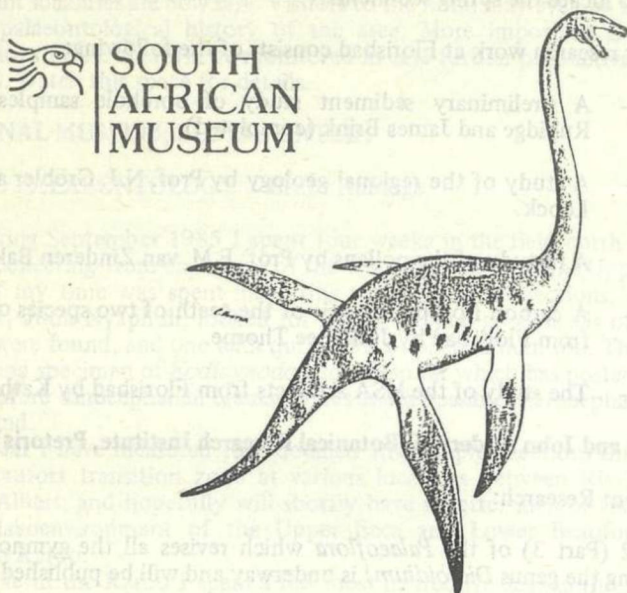
Overseas Travel:

We undertook a private trip to Europe from mid June to end of August 1985 and of course couldn't resist the opportunity of furthering our palaeo-

botanical research. The highlights were making contact with a Chinese palaeo-botanist specialising on Triassic fossils. She was on study leave to the Natural History Museum, Stockholm. John spent two intensive weeks with Dr Lea Grauvogel-Stamm of Strassbourg working with her on his Megaplant Genera project.

Visitors:

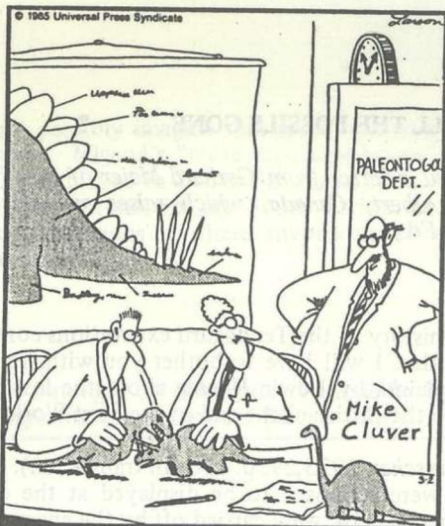
Dr Edgar Riek from Canberra, Australia, worked on our Molteno insect collections during September.



The South African Museum is now selling 1:45 scale models of dinosaurs, fossil mammals and the blue whale. Each model is sold with an illustrated information brochure including a high quality line drawing by the artist Cedric Hunter which may be used in school projects etc.

Imported from the British Museum (Natural History), these authentic replicas are moulded in solid, unbreakable, self-coloured plastic and would appeal to all ages as either conversation piece or educational toy.

Price lists obtainable from Mr. N. van Niekerk, S.A. Museum, P. O. Box 61, Cape Town, 8000.



"Juri! Roger! You've got plenty of research to work on....and for the last time, stop playing with those plastic models. (see opposite page)



WHERE HAVE ALL THE FOSSILS GONE?

(I recently received a letter from Gerhard Maier of the Tyrell Museum of Paleontology in Albert, Canada, which raises an interesting question: can anyone help? Ed.):

Dear Mike,

Work on the history of the Tendaguru excavations continues, and raises another question that I will have to bother you with. In two references I came across complaints by Edwin Hennig about the loss of fossil material from Tendaguru to the British at the end of the First World War:

Hennig, E. *Umschau* 1925;29. p. 110 (In translation): "... important finds, which were supposed to be displayed at the exhibit in Dar es Salaam in August 1914, were carried off by the enemy and are obviously hopelessly lost to science."

Hennig, E. *Zeitschrift der Deutschen Geologischen Gesellschaft* 1933; XXXIX, p. 509 (In translation): "In addition, all valuables were lost, such as those excavation results from Tendaguru brought to the exhibit in Dar es Salaam in 1914, Krenkel's and Reck's collections during the war"

Though these claims were intriguing, there were so many bitter references to the loss of their colony in the Tendaguru literature in the years following the war, that I expected to find little concrete evidence about this supposed "theft", Dr. Jaeger in Berlin was not aware of any such claims. But then I came across another reference which appears to confirm some of this:

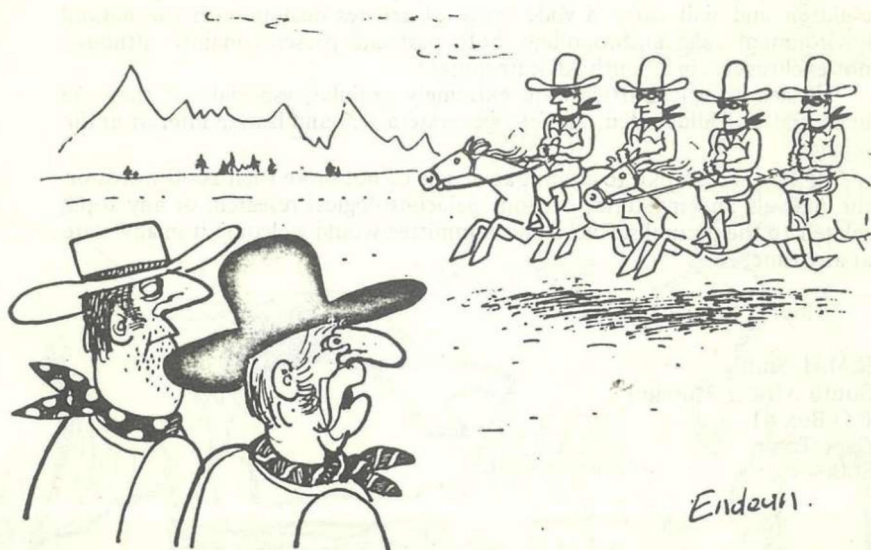
Migeod, F.W.H., *Journal of the African Society* 1927; XXVI, p. 325: "Even before the war was over, the South Africans on active service were alive to the scientific value of the remains and after the Armistice collected some of the more accessible bones and despatched them to the Cape museums. They were, however, stopped in this by the newly-formed local Administration, though nothing further was done until in 1924"

Although I suspect that items may have disappeared as "souvenirs" or been thrown out or lost in the general confusion of the war, the references to Cape museums nags me. Do you have any idea at all what museums Migeod might have been referring to? Though there was fighting in the area

near Tendaguru I can't possibly imagine that specimens were collected by Allied troops at this time. Migeod's "more accessible bones" must refer to those which were to be displayed in Dar-es Salaam in 1914. Or?? Are you aware of any Tendaguru material in any South African or Zimbabwean museums or university collections? Is there anyone else to whom I might write regarding this question?

Sincerely
Gerhard Maier

(If any reader can shed any light on this matter, I would be happy to act as "Postman" to get the information to Gerhard Maier. — Ed.)



Endeum.

"Look! It's the Clone Ranger!"

SAGITTARIUS

A MAGAZINE OF NATURAL SCIENCES AND ANTHROPOLOGY IN SOUTHERN AFRICA.

The South African Museum's popular publications committee is launching a new quarterly magazine called *Sagittarius*. Unlike the *Annals* this publication is being funded by private companies through sponsorship and advertising. Initially the magazine will comprise 24 pages incorporating as much colour as finances allow and will be distributed free to schools, institutes and companies in South Africa regardless of race. Thereafter it is hoped subscriptions and sales of the magazine will cover production costs.

The magazine is aimed at the informed public, teachers and high school children and will carry a wide range of articles dealing with the natural environment and anthropology, both past and present, mainly, although not exclusively, in a South African context.

Palaeontological articles are extremely popular, especially if they are lucid and well illustrated, and can generate a real and lasting interest in the science.

If you would like to submit an article of not more than 2000 words on the marvels and mysteries of your palaeontological research, or any topic related to the natural sciences, the committee would welcome it in any state at any time.

Hoping to hear from you.

R.M.H. Smith
South African Museum
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Cape Town
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