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NEWS
PAL NUUS

Biannual newsletter of the Palaeontological Society of Southern Africa
Halfjaarlikse Nuusbrief van die Paleontologiese Vereniging van Suidar Afrika
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Spinosaurus maritimus HUXLEY

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FROM THE EDITOR

Greetings all ye Palaeo-folk!

It's that chilly time of the year when we in Grahamstown are again gearing up for the annual National Festival of the Arts. In April 1997 the Grahamstown Foundation will be launching an annual National Science Festival (not to be confused with the Schools Science which is also held in G'Town in June each year). Judging by the amount of effort and forward planning that is going on at this stage, I'm sure that Science Festival will, in time, eventually rival the Arts Festival. I believe that this event presents a wonderful opportunity/platform for our society to promote the science of palaeontology and as a member of the "Earth Sciences Sub-committee" I would appeal to members of our SA Palaeontology fraternity to think of how we can best make use of this opportunity. Perhaps this should be further discussed at the BGM in Stellenbosch in September.

Don't forget you only have two months to excavate a new editor for Pal News as this will be my 8th and final production. I'll be handing over at the PSSA'96 BGM in Stellenbosch. New bones are needed for the task! I'm looking forward to seeing many of you at PSSA'96 at the end of September. Cheers.

oOo

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Albany Museum
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GRAHAMSTOWN

Front Cover: Lystrosaurus - our

News from Eric Anderson - J.L.B. Smith Institute of Ichthyology

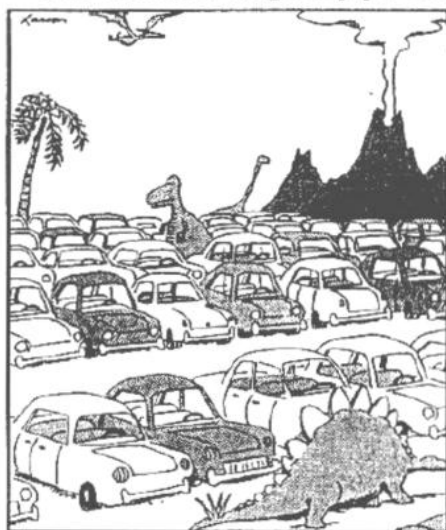
The Grahamstown Devonian estuarine lagoon site was first described in 1977, but

after a hiatus of nearly a year, and I now have two student assistants exploring newly uncovered areas. The shale is more extensive than we thought of it well bedded. We're still finding lots of plant material (nothing I have recently found some interesting eurypterid bits and more of *Bothriolepis* sp. nov. Three fish papers are planned: one on the placoderm (press), the strange chondrichthyan (almost finished) and all the sarcopterygians.

I obtained further FRD funds to bring John Long of the Western Australian Museum back for a return visit this year. He will fly in early September to do more work at the Albany Museum (specimens) and the J.L.B. Smith Institute (papers in prep.). We both will then travel to the Western Cape for the Geological Survey field trip planned for mid-September to hunt for the Bokkeveld Group, a long-held desire by both of us. Then it's off to Stellenbosch and PSSA-9. Work there and after by John includes discussing fossil fish degree work with students Fiona Evans and Pat Bender.

A major project for me since the end of last year has been the description of a now fairly famous Karoo crater lake fish collected by Roger Smith and Annelise Crean in 1984. Critical skull, gill arch and hyoid characters can be observed in the material, but there are enough important features to place it within superfamily Galaxiioidea. These fishes are extant, mostly restricted to cooler climates of the southern hemisphere, and are related to the boreal *Galaxias*. The current fossil record extends only to the Miocene, but the Karoo form is Late Cretaceous in age. A paper on all this is planned for PSSA'96.

--Eric



Jurassic parking

News from Arthur Cruikshank - Leicestershire Museums Service and

Geology Dept, University of Leicester, UK.

Taking a moment off from serious things... This is a summary of a long very interesting transect of eastern Gondwana, undertaken between 10 Feb and the 22 May this year.

Meeting with John Long of the Western Australian Museum while in Grahamstown at the PSSA meeting in September 1994, led to invitations to him and Ewan Fordyce of Otago University, Dunedin, to visit and co-author papers on their undescribed plesiosaur material. At the last count we altogether have four papers nearing completion; two real ones and two notes (see below).

Taking advantage of a cheap(?) one-way round the World ticket, it became possible (on the way to Perth) to visit Sydney, Brisbane, Melbourne, Adelaide (breathlessly for about two hours) and then home by way of the National Botanic Institute in Pretoria. The count of plesiosaurian heads in Australia and New Zealand is quite impressive, and Colin McHenry in Brisbane is doing his best with 8 or 9 *Kronosaurus* skulls and partial skeletons. The skulls are up to 3 m long, and even watching him manoeuvre them brought tears to my eyes. The New Zealand specimens come in concretions weighing up to 10 tonnes, which introduces organizational problems all of their own.

It would appear that specimens attributable to the genus *Leptocleidus* (*L. capensis*) are quite common in the Australian Lower Cretaceous (and so to a further visit perhaps), alongside other new and exciting forms with a lot to tell about what was going on in the Upper Cretaceous southern hemisphere oceans. The famous opalized skeleton ERIC from Coober Pedy is described by Natalie Schroeder, and may prove to be very close to the African species.

It is also becoming clear that a strange hiatus exists between the extinction of the plesiosaurs at the K/T boundary and the appearance of the first cetaceans in the Lower Eocene. Maybe a gap of about 10 - 12 MA with no large tetrapod predator.

My time in Pretoria has been spent finalizing the Molteno palaeontological paper with John and Heidi Anderson. I also gave a talk in my old stomping grounds, the BPI Palaeontology. Very glad to see the old dias still in use! (the 18th May) I have to look forward to 'Auld claes and porrage' on my way to the UK. I can only express my great appreciation and thanks everyone who has helped make this trip the enjoyable success story I hope to write about in the next months.

Papers in preparation

1. with Ewan Fordyce. A new cryptoclidid plesiosaur from the Late Cretaceous of New Zealand.
2. with John Long. A new species of *Leptocleidus* (Reptilia; Pliosauridae) from the Birdrong Sandstone of Western Australia. Records of the Western Australian Museum.
3. Long and Cruickshank. Further records of plesiosaurian reptiles from the Jurassic and Cretaceous of Western Australia. IBID.
4. -----, First record of an Early Cretaceous theropod dinosaur from Western Australia. IBID.

Arthur Cruickshank

oOo

News from Francis Thackeray - Transvaal Museum, Pretoria.

Things have still been very busy at the Transvaal Museum. Fieldwork continues on a small scale at Kromdraai. On the research side, the Palaeontology Department enlisted the help of many research staff and collections managers at the Transvaal Museum, to take measurements from many different species, for purposes of a morphometric study, extending the work published recently in *Palaeontologia Africana* (Thackeray, Helbig, Moss, 1995). We are working on the idea that it may be appropriate to try to quantify the probability that any two fossil specimens are conspecific, rather than trying to pigeon hole them into one or other taxon.

Francis attended a Palaeoanthropology Society meeting in New Orleans. He was also invited to attend the opening of an exhibition featuring robotic australopithecines, on display in the Cologne Zoo.

Heidi Fourie is progressing well with her *Terocephalians*.

Francis Thackeray

oOo

Howler: Student discussing the Meteorite Impact Theory for the extinction of the dinosaurs.

"A dim star similar to our Sun Nemesis orbits around our galaxy and completes an orbit once every 26 million years hurling meteors at the earth, therefore this theory also supports the meteorite theory."

News from Roger Smith, SA Museum - Div. of Earth Sciences, Cape Town.
News flashes from S.A. Museum Karoo lab :-

Anusuya's baby is due any day now. Hope she gives birth after-hours because anything produced during working hours becomes property of the Museum.

NEWS FLASH: *Anusuya is now a palaeo-mum!!! Young Evren Chinsamy-Turan (a boy) arrived sometime near the end of May. Congratulations to Anusuya and Younis on ensuring the continuation of the species. Ed.*

Roger had an easy 2 Oceans ultramarathon (his 6th in a row), finishing the gruelling 56 km in 5 hours 18 minutes. This was the first time he managed not to loose any toenails.

In January Annie, Paul, Georgina and Kerwin spent a blustery, blistering week in Fraserburg rescuing "Janine" the *Rachiocephalus* from the elements. This fossil starred in "Paleoworld II", a documentary being screened on the Discovery channel in the States and UK.

Memorable moments: airborne tent, Paul's sunburnt back, Annie and Georgina's skinnydip in the farm dam and farmer Conrad van Wyk's iced cooldrinks.

Kerwin has named his current fossil "Janine", after his current girlfriend. He first prepared her head then suddenly switched to the tail end - we were wondering if this has anything to do with their relationship.

Last month we hosted photographer Jonathan Blair from Wilmington, Delaware, and National Geographic writer Hillel Hoffman from Washington, DC. They spent a total of 3 weeks in the field with Roger, Annie and Paul taking close to 3 000 photographs for an article on the end-Permian mass extinction. Due out next year, this article will reach 8 million subscribers throughout the world.

Hedi was more than anxious when, after spending several months cleaning "Clive" the *Lystrosaurus*, we took it all the way back to Bethulie and re-embedded it in the rock where it was found. Illuminated with a variety of flashes and reflectors, Jonathan shot it from every angle throughout the afternoon and into the night. All this for one photo- but what a picture!

Pippa is lost in France for a couple of months looking at fossil birds and studying curation methods for fossil vertebrates. She will be based at museums in Lyons and Paris. The visit is entirely funded from a bursary awarded by the French consulate in South Africa. It is meant to encourage collaborations in the fields of archaeology and palaeontology.

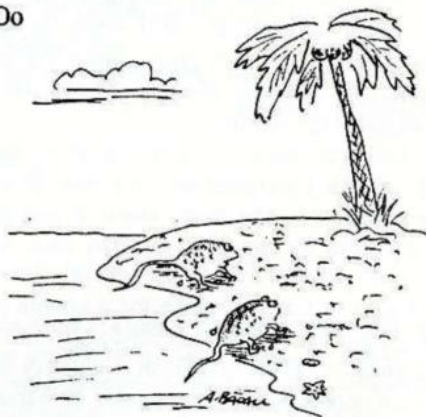
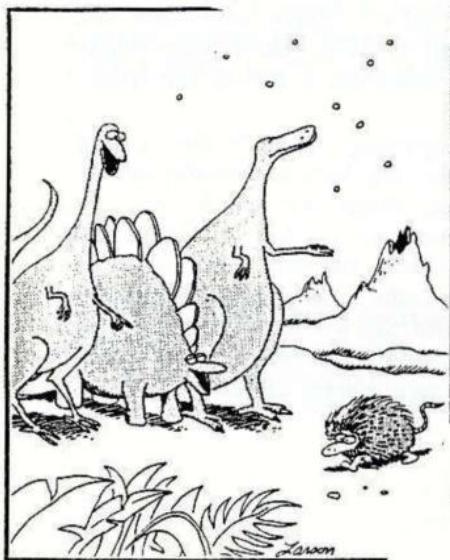
We are off to Bethulie again very soon to collect a large (3m-long) bonebed that Annie found on our last visit. This pile of disarticulated bones is preserved in a depression formed in the ancient Karoo floodplain some 250 million years ago. With any luck, it will give more clues as to the scavenging habits of the mammal-like reptiles.

Talking of scavenging, Annie has uncovered a suite of bite marks on the bones of "Mamafura" a large Karoo dicynodont as well as a broken tooth of the carnivore. It seems that they had a preference for rump and hind quarters. An honours student from Stellenbosch would like to study this specimen.

Last December we unfortunately lost **John Pether** to the offshore diamond fields of the West Coast. He has taken up a post with De Beers Marine but he has promised to stay in touch. We welcome **Sandra Lawrence** who joined us in May as a temporary research assistant. She is currently being trained at UCT to do all the petrographic thin section preparation for Anusuya, Herbie and Roger.

July will be spent at Etjo Mountain in Namibia, finishing the work we started last year and digging up a magnificent complete *Erythrosuchus* skeleton. This cow-sized carnivore is extremely rare and we are contracted by the Namibian Geological Survey to supervise its excavation. We will also train a Namibian how to prepare the fossil which will become the centrepiece of the new Geological Museum in Windhoek. Prof Farish Jenkins's team from Harvard University will be joining us and we hope to find him some advanced cynodonts to work on. All for now, **Roger Smith**

oOo



"Breathing! Wow! What a concept."

News from the Bernard Price Institute for Palaeontological Research
Correspondent - Ann Cadman

In recent months all at the BPI have been frenetically involved in preparations for the University's Open Day, which took place on 11 May. The weeks leading up to this event saw much scurrying around, with **Sue de Villiers**, aided and abetted by **Marion Duncan** and **Joseph Fink** of Josemar, working incredibly hard to ensure that our contribution would not go unnoticed. With the assistance of **Marion Bamford**, numerous posters of outstanding quality were prepared: these were strategically placed throughout the department. **Chris Gow** was the official photographer for our mug-shots, which were displayed along with the other fossils (for which the BPI is possibly more renown). All other members of staff and students, including our visiting German student, **Dorothy Bouer**, contributed in numerous ways to setting up displays. Our secretary **Sherine Isaacs** proved what we were all starting to suspect: that she is the stabilising influence in the department, and that things might just fall apart without her.

In the week prior to Open Day several radio stations were eager to broadcast news of our activities, so that at various times **Sue**, **Bruce Rubidge** and **Joe Mncube** were interviewed.

Then **THE DAY** dawned, bright and sunny. BPI staff and "helpers" (wives, husbands and miscellaneous children) were ready for active service. This was long before the first enthusiastic palaeontologists-to-be stepped across the threshold of the Van Riet Lowe building. Visitors were either escorted to or pointed in the direction of the fossil preparation room, the museum, the palaeobotany herbarium, the video-viewing room, or the lecture theatre. Each venue was manned by one of us, giving demonstrations of palaeontological techniques or discussing specimens. **Professor James Kitching** spoke on his Antarctic adventures, **Bruce** on Karoo fossils and **Colin Menter**, of the Department of Anatomical Sciences, on hominids.

In the foyer of our building various items were for sale, minted especially for Open Day. These included custom-made T-shirts and stationery, and the fossil casts produced by Josemar. The field-camp which had been erected outside the building drew much attention, especially when the aroma of our boerewors lunch braai started wafting across campus. Adding to the authenticity was the treasure-pit, where young aspirant palaeontologists were able to test their fossicking skills.

At the end of the day we all collapsed around snacks and brews of various hues in our common-room, where the consensus was that yet another phenomenal blow had been struck for palaeontological progress!

Visitors to the department

Numerous guests were welcomed to the BPI in recent months, among them several familiar young faces: **Fred Grine** of the State University of New York, **Friedeman Schrenk** of the Landes Museum, Darmstadt, and **Arthur Cruikshank** of Leicester University. Arthur and **Paul Barrett**, of Cambridge University, both presented seminars, and **Dan Brooks** of the University of Toronto gave a workshop on Phylogenetic Systematics.

Faculty of Science Lecture

On 8 May the BPI presented a lecture entitled "*Dinosaurs and dragons — wonders of an ancient southern continent*". The address was delivered in three parts. **Bruce** opened with a look at the fossil vertebrates of the Karoo, **Marion Bamford** expanded the scenario by describing the plant life, and **John Hancox** summed up by providing insight into the geological setting of both plants and animals. It proved to be a popular lecture, as evidenced by the attendance figures, making this one of the best-supported faculty lectures in recent years.

Research activities and field trips

Bruce took **Johan Neveling**, a new masters student working in the Palaeontology Department at the Council of Geoscience in Pretoria, on an exploratory trip to examine rocks of the contact of the *Lystrosaurus* and *Cynognathus* Assemblage Zones of the Beaufort. (This is an interesting contact as no genera of fossil reptiles from the *Lystrosaurus* Assemblage Zone cross in to the *Cynognathus* Assemblage Zone). Joined by **Gideon Grunewald** from Clarens, they were looking for good collecting sites for Johan's project, covering ground from Senekal to Tarkastad. **Patrick Bender**, who works in the Museum of the Council of Geoscience, joined the latter part of this excursion to view fossil fish localities in the Nieu Bethesda district. Patrick is registered at the BPI for a PhD degree on the fish of the lower Beaufort.

Only weeks later **Bruce**, **Richard Lewis** and **Caiphus Hlatswayo**, and **Johan Welman** of the National Museum in Bloemfontein, travelled to the Phillipolis district to look at fauna at the contact between the Beaufort and Ecca. They recovered numerous fossils, which still need to be prepared, but which

suggest that the lowermost Beaufort is also present in the Free State.

During the last weekend of May **Bruce Rubidge** and **Chris Gow** accompanied **Darlington Munyikwa** to his field study area on the north bank of the Limpopo River. (Darlington, an honours student, is the palaeontologist at the Bulawayo Museum.) Said Chris, *"It was a rare treat to get into natural bush teeming with game and to gain first hand experience of the Stormberg equivalent rocks and their fossils in Zimbabwe. Two blissful nights (apart from the very audible sonar pinging of fruit bats in the fig trees) on the banks of the swollen Limpopo. Nice prosauropods, one protosuchian tooth, and some perplexing Beaufort stratigraphy."*

Marion Bamford continues her analysis of fossil woods, expanding the data base of Karoo material. She is finding evidence of broad trends, so that it has become important to examine wood from additional sites. Marion will be attending the 5th Quadrennial Conference of the International Organisation of Palaeobotany in California at the beginning of July, where she will present a paper entitled "Mesozoic coniferous woods from southern Africa". Marion led the Geology 3 students on a mini field trip to the Lawley site in Lenasia. This is where thousands of specimens of the *Glossopteris* flora are regularly turned into bricks by Brickor. **Richard Lewis** puffed and panted an enormous consolidated block of material into the vehicle for transport back to the BPI; said specimen was duly attacked and generally battered about on Open Day by enthusiastic leaf-searchers.

Ann Cadman is working on early Compositae pollen from the west coast of southern Africa, and will be presenting this Tertiary research at the 9th International Palynological Congress in Texas at the end of June. She continues contract work for various pharmaceutical companies interested in modern pollen rain: such information is used when testing the efficacy of new drugs for the treatment of allergy.

Sue de Villiers is approaching the sticky side of her PhD project, piecing together the complicated story of her Tertiary pollen from the west coast: she hopes to complete her dissertation by the end of the year. **Grig Aitken** has a similar dead-line for his Permo-Triassic palynological project, which he is now approaching from the "business" side of geology. **Grig** has joined JCI as a mining geologist, and is working at Western Areas Gold Mine. We wish him great success in this venture.

Elizabeth Latimer is still continuing her PhD studies of temnospondyl amphibians of the lower Beaufort, correlating these with east African specimens.

Alain Renault is hard at work sorting out the cranial morphology of the Triassic dicynodont, *Kannemeyeria*. He has been in the field several times in the past few months, determining stratigraphic positions and excavating some interesting Karoo reptiles from the southern Free State.

John Hancox is describing two new dicynodonts from the uppermost levels of the Burgersdorp Formation (*Cynognathus* Assemblage Zone). These fossils form part of a new fauna from this zone, allowing for better age constraints and correlation of the uppermost Beaufort.

Ann Cadman

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SYMPOSIUM OF AFRICAN PALYNOLOGY

All palynologists and interested persons are cordially invited to attend the **Third Symposium of African Palynology**, to be held from **7 - 13 September 1997**, and hosted by the Bernard Price Institute (Palaeontology), University of the Witwatersrand, under the auspices of the International Association for African Palynology/Association Internationale de Palynologie Africaine.

Proposed topics span the entire range of palynological research in Africa, from palaeopalynology to aerobiology.

Besides the formal scientific sessions, various social functions and excursions are also planned.

For further information contact:

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PO WITS, 2050

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Email: 106caa@cosmos.wits.ac.za

News from Norton Hiller - Christchurch, New Zealand

I am still Acting Curator of Geology at the Canterbury Museum but my contract has been extended until the end of November. We now have in place a timetable for new staff appointments so I should know by mid-September whether I will be staying on in this position or not.

A few months ago I had a visit from Arthur Cruickshank who was in NZ to do some work on a Cretaceous plesiosaur with Ewan Fordyce of Otago University in Dunedin. They spent a couple of days at the Canterbury Museum en route to the North Canterbury late Cretaceous localities and had a look at our excellent plesiosaur material. They encouraged me to resurrect a project to describe this material with the help of Craig Jones from Canterbury University. After tackling some Devonian palaeobotany, it seems I must expand my education still further to take in the world of marine reptiles. In the meantime I continue work on local Cenozoic brachiopods and I will try to finish off some work that I was unable to complete in SA. Recent publications:

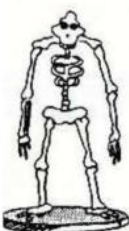
HILLER, N. 1994 The biogeographic relationships of the brachiopod fauna from Marion and Prince Edward Islands. *S. Afr. J. Antarct. Res.* 24: 67-74. (published in December 1995)

GESS R.W. and HILLER, N. 1995 Late Devonian charophytes from the Witteberg Group, South Africa. *Rev. Palaeobot. Palynol.* 89:417-428.

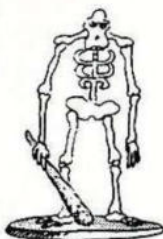
HILLER, N. and GESS, R.W. 1996 Marine algal remains from the Upper Devonian of South Africa. *Rev. Palaeobot. Palynol.* 91:143-149.

oOo

Norton Hiller



Jaxi man



Peking man



Cro-Magnon man



Jazz man

- 13 -

Dispute arises over dinosaurs' care

The New York Times

Since 1978, when Jack Horner discovered a fossil assemblage of baby dinosaurs apparently killed in their nest, many paleontologists have accepted his hypothesis that dinosaurs cared for their young long after hatching. But two graduate students have challenged that idea, contending that the domestic lives of dinosaurs may not have differed much from those of modern crocodiles.

In a paper being published today in the journal *Science*, Nicholas R. Geist and Terry D. Jones, graduate students at Oregon State University in Corvallis, argue that the pelvic bones of baby *Malasaura* dinosaurs

are well ossified, strong and perfectly capable of supporting the babies outside the nest.

Bone development is similar in modern baby crocodiles, they say, which are able to leave their nests and forage on their own immediately after hatching.

The *malasaura* was a plant eating genus of duck billed dinosaur, which grew to about 30 feet. Fossilized babies in the first nest Horner discovered were about two feet long.

Horner, who is a curator of the Museum of the Rockies in Bozeman, Mont., bestowed the genus name *Malasaura* (which means, "fostering mother lizard") on the

nesting dinosaurs he discovered in Montana, presuming that a mother dinosaur had looked after the nestlings during their early months or years.

But Geist and Jones argue that this conclusion is not supported by the evidence of the bones.

They note that modern birds fall into two classes: precocial, like ostriches and most shore birds, which are able to leave their nests right after hatching, and altricial helplessly nest bound, like finch chicks.

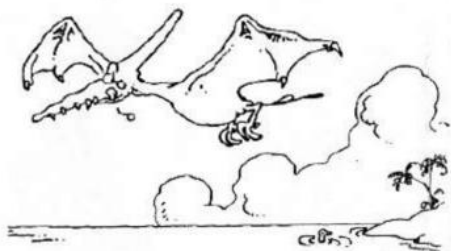
These two categories, Geist and Jones say, can be distinguished by their bones; the precocious species have much stronger and more de-



"What a find, Williams! The fossilized footprint of a brachiosaur! ... And a *Homo habilis* thrown in to boot!"



Still in its early 20 Pothole claims

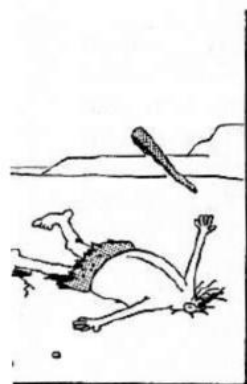


e for young

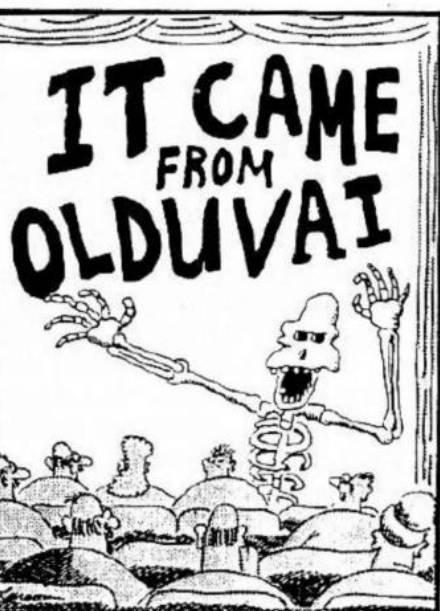
veloped pelvic bones supporting their leg muscles. If an analogous difference existed among dinosaurs, they argue, malasaurs babies, which had well developed bone structures for supporting their legs, were likely to have been precocious.

"Nevertheless," Horner said, "there is clear evidence that malasaurs babies lived in nests.

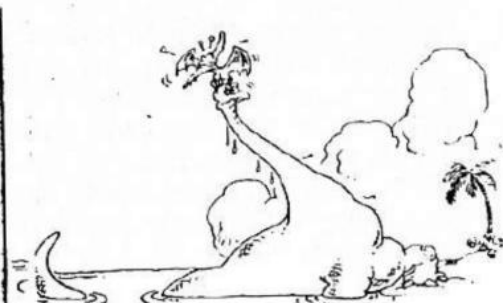
"If babies ventured out of their nests and then returned, as Geist and Jones are suggesting, they must have had a reason to return, and one possibility is that they gathered in the nest for feeding. You don't see crocodiles looking after their young that way."



ges, the Olduvai
its first victim.



Anthro horror films



News from Patrick Bender - Council for Geosciences Museum, Pretoria.
Well I've nearly finished preparing a whole lot of Karoo palaeoniscid specimens from Wilgebosch, New Bethesda district, and can now start proper analysis. I completed a field trip to the area in February with Bruce Rubidge and Johan Neveling, we did a few traverses in order to look at the geology, there are one or two large pond/small lake sequences which contain the fossil fish. I will be going over to the Natural History Museum, London for a few *(the rest of this email message was lost in the internet ether. Before I could correct the problem Patrick was off to the US and is, for the moment, also lost - Ed.)*

oOo

News from Fiona Evans, Zoology Department, University of Stellenbosch.
(Fiona "oscillates between the Geological Survey, the SA Museum, and the Zoology Department at Stellenbosch" where she is registered - Ed.)

In early February I was grateful to receive information on Waaipoort Formation (upper Witteberg Gp.) localities and some important acanthodian material from Mr J Looek (University of the Free State, Bloemfontein). This material will soon be photographed under the SEM soon. Hopefully this technique will provide more detail than the photographs and latex casts of this material that I have at present. No acanthodian material from the Waaipoort has been formally described in any detail so I am trying to fill this gap with all the material that I have assembled from collections of the Geological Survey in Pretoria and Bellville, Stellenbosch, Bloemfontein and from my own collecting. Some of it is comparable to what is found in the Upper Bokkeveld, which I realised when looking through the Montagu Museum collection, and going on the SACS trip in late March. While on the SACS trip, Drs Theron and Almond, Mr Looek and I collected some fantastic Bokkeveld placoderm skull and trunk elements, acanthodian spines and scales, as well as palaeoniscid and plant fragments from the Waaipoort Formation.

I made 3 field trips to log parts of the Lake Mentz Subgroup outcrops south of Laingsberg, but unfortunately did not have time to follow-up on the arthropod tracks which apparently occur in the Waaipoort nearby - Next time! This was followed by much sawing, polishing, and microscope work, which has revealed some very attractive rocks with very "busy" internal structures. I am also awaiting results of XRD and palynological analyses which are kindly being done for me by the Geological Survey.

In mid-April I was fortunate to attend the SEDPLETT course in Plettenberg Bay which was lead by Dr Koos Reddering of the Geological Survey in Port Elizabeth. This was an incredible learning experience for me and has given me a lot of insight into, and a better perspective of the geology of the Waaipoort Formation. At Plett I met up with my field assistant from Jo'burg and drove to THE Lake Mentz fish fossil site! I collected and salvaged a lot of palaeoniscid fish material, and saw some stunning burrows in the Kommadagga Subgroup. From there, I went on to the Willowmore area via three other localities, to refine observations made on a previous trip. I found some more acanthodian material, as well as burrows, palaeoniscids, plants, (no eurypterid - yet!), and bivalves. These are the first well established bivalves to be found in the Lake Mentz Subgroup. While I was staying at Soetendalsvlei, I managed to entice the farmer (Mr O.A. Theron), on whose land I was collecting, into donating half his fossil collection to the SAM! I returned to Cape Town via Droëkloof (Klaarstroom), and although Oom Roy Oosthuizen was not at Zwartskraal at the time, I was pleased to hear recently that his health is much better now and he has returned to his farm.

Fiona Evans

oOo

News from Billy de Klerk - Albany Museum, Grahamstown.

At the beginning of the year our palaeo artist, Gerhard Marx, started with the construction of a life-size model of *Syntarsus* - the small theropod dinosaur, that Mike Raath made famous. This superb model was completed in mid May just prior to Gerhard leaving for the US on an extended palaeo/museums visit. He made a point of visiting as many museums with a palaeontology theme in the SW as possible. In particular he made a point of visiting the Ghost-Ranch *Ceolophysis* site in New Mexico.

During much of March I was kept busy writing up the 20-odd WWW internet home pages for the Museum and we went live on the 25th March. Our home page address is: <http://www.ru.ac.za/departments/am/> CHECK US OUT! My Earth Science page (<http://www.ru.ac.za/departments/am/geol/>) also provides a gateway to numerous palaeontology resource pages on the WWW.

On the research front my long-term project on investigating the lower Beaufort fossil assemblage in the Eastern Cape and the nature of the Beaufort/Ecca contact is continuing. This project is going to be greatly eased by the recent printing of the long-awaited Grahamstown 1:250000 Geological Map. Chris Gow and I submitted a paper describing the specimen of *Eumotosaurus*

that was found close to Fort Brown in the Great Fish River valley.

Gow, C. and de Klerk, W.J. 1996. First record of *Eumotosaurs africanus* (Amniota; Parareptilia) from the Eastern Cape. *Palaeontologia Africana*. (In press)

A collaborative palaeontology project investigating the vertebrate fossils in the Cretaceous beds of the Algoa Basin is continuing with Callum Ross and Cathy Forster of the State University of New York - Stony Brook, US. Callum Will be joining me on a short field trip to Kirkwood at the end of June - so hold thumbs, we may yet find that elusive beast!

. At the beginning of the year I was approached by the Rhodes Univ. Geology Dept. to present the 1996 undergraduate palaeontology course with a view to continuing in future years. The course, consisting of 20 lectures and 8 practicals, was presented during May. As one can imagine I was thrown into the deep end and was compelled do an enormous amount of preparation and READING (which I thoroughly enjoyed). Well, its now all done and I must thank Bruce Rubidge and Norton Hiller for their guidance and help in setting up the course.

Billy de Klerk

oOo

News from Johann Welman - Karoo Vertebrate Palaeontology Dept., National Museum, Bloemfontein.

Johann Welman, John Nyaphuli and Joel Mohoi joined Bruce Rubidge, Richard Lewis and Caiphus Hlatshwayo from BPI on a fieldtrip to the Southwestern Free State. In addition Johann and J.C. Loock undertook a few short excursions in the area around Bloemfontein and a number of fossils of stratigraphic interest were collected. J.C. and Johann also conducted a group of interested members of the public and students to a locality near Wepener to look at aspects of the Permo-Triassic boundary.

Johann finished his PhD at the end of 1995. This work focussed on a comparison of the braincases of the South African archosauromorphs and he also published a paper in the October 1995 issue of South African Journal of Science titled "Euparkeria and the origin of birds". *Johan Welman*

oOo

PEOPLE ON THE MOVE

1. *Jeff McKee informs me that he has moved to Ohio in the US and from mid-June can be contacted at his new address:*

*Dr. Jeffrey K. McKee, Department of Anthropology
The Ohio State University, Lord Hall
124 W. 17th Ave., Columbus, OH 43210 - USA*

3. *Mike Raath. The Eastern Cape museum fraternity and particularly the local palaeontologists bade farewell to Mike who has moved from Port Elizabeth back to Johannesburg (the "Big Smoke"). Mike has taken up a post at the BPI - Palaeontology at Wits and so will continue to make his contribution to in Palaeo from Gauteng. (Ed).*

2. **News from Tom Mason (ex Geology Dept., University of Natal, Durban)**
My copy is short and sweet. My farewell and swansong even. I will be off to Ireland in July. My new post is the Director of the Armagh Planetarium and Eartharium. I will be responsible for putting on a new display of things "Earthy" almost immediately. The Eartharium was obviously designed by an astronomer as there are lots of Earth images from space and a few boards dealing with pollution and population etc, but alarmingly for the proper earth scientist, there is not a single rock to look at, never mind touch. I suppose that astronomers are so accustomed to seeing things as images they forget about the joy of touching and handling the samples.
I will be on Email there and as soon as I have my new address I will post it to you. How much palaeontology I do will depend on many factors but I would like to keep my hand in, and keep in touch. I will miss many things about this huge, fascinating continent, one of them will be the camaraderie of the palaeontologists, and the field trips to fossil places.
From 1st August 1996 my new Snailmail address will be:

Dr Tom R. Mason, Director, Armagh Planetarium & Eartharium,
College Hill, Armagh BT61 9DG, Northern Ireland.
Phone: +10 2731 260 2520/2516 Fax: +102731 260 2280

Tom Mason

oOo

LIGHT RELIEF AT A DINOSAUR TRACKWAY

I thought that the following PALEONET posting by Glen J. Kuban on some humorous occasions while working on the Paluxy track site would provide some light relief - Ed.

".... I thought I would share some of the more interesting comments and questions I have heard from visitors while working on the tracksites. The quotes may not be verbatim, but are as close as I can remember.....":

Lady with puzzled look on her face:

"I know dinosaurs were heavy, but I never dreamed they could punch footprints like this in solid rock"

Father to son at tracksite:

"You know Billy, these dinosaur footprints are HUNDREDS of years old!"

From any number of visitors seeing trackways head into pools of water:

"Look junior, that's where the dinosaur took a swim."

(Unfortunately, I don't think they were all kidding).

Likewise, many visitors have asked,

"Why did dinosaurs make their tracks in this riverbed?"

In a similar vein...

Roland Bird reported that when he worked on the tracks in the late 1930's, one of the local workmen helping to excavate the tracks started scratching his head when the prints continued under the bank, and was consternated how the dinosaur was able to continue under the overlying rocks.

Countless people have asked questions like:

"How did the tracks survive all those millions of years in this riverbed, with the water flowing over them?"

Some of the cutest comments (and most intelligent) were from children, like the little boy about 10 years old who explained to people around him that the tracks were made long ago by dinosaurs walking in soft mud that later hardened into rock, and that the tracks stayed buried for million years until the river scoured off the layers over them--in response to some of his father's less than incisive comments and questions similar to those listed above.

Then there was the cute little girl (about 6 years old) who dashed all around the prints in an utter fit of excitement, then suddenly stood still and exclaimed "Wow, this is just like being on another planet!" She also was tickled pink when I told her I was studying the prints and wondered if she would like to be in a photograph I was taking, and which might appear in a magazine. I do not think my ruler was wide enough to measure her smile.

Imagine how neat it would be if most adults had even 10% of her level of excitement and interest in the natural world. I always felt it was one of the primary goals of educators to simply avoid squashing the natural curiosity and excitement about the world that most children are born with. *Glen J. Kuban*

Glen has developed a most informative web page for the Paluxy Dinosaur Trackways in Texas - <http://members.aol.com/paluxy2/paluxy.htm>. In addition he maintains a VERY useful listing of Natural History Museums on the Web at <http://members.aol.com/fostrak/museums.htm>. Check them out! (Ed.)

oOo

EVOLUTION - (From a recent discussion of metaphors and Darwinism)

"I don't know who you have been listening too.. But, natural selection is not the "engine" of evolution. It is one of how' explanations for the fantasy of evolution. Genetic mutation would be closer to an engine, with natural selection as one of the wheels on the evolution car. Natural

NO, NO, NO! Favourable mutation is the engine of the evolution car. Natural selection is the transmission. Genetic drift is the differential. Neutral mutation is the driveshaft. Paleontology is the back-up lights. Genetics is the headlights. Molecular biology is the windshield. Biochemistry is the windshield wipers. Stabilizing selection is the brakes. Transitional fossils are the turn signals. Sexual selection is the hood ornament, grill, and rear spoiler. Phylogeny is the interstate highway system. Extinction is the exit to the bad part of town you shouldn't take. Adaptation is the mechanic who puts on the snow tires in winter. Creation science is the fake hood scoop covering a non-existent turbocharger. Darwin is driving the car blindfolded, Fisher and Wright are sitting next to him on the front seat reading the map. Steven J. Gould is in the back seat telling him he missed a turn. Lamarck is the pedestrian he ran over. Creationists are the howling mob of ignoramuses chasing the car and throwing rocks to demonstrate the literal truth of Genesis." :)

Technical Tips & Chatter

A forum where members are encouraged to present any ideas and suggestions of a technical nature. Please send in any snippets on new palaeo-techniques or palaeo-products that you find improves on your curation and research activities. Comment and discussion of contributions will also be welcome. Ed.

For a really ridiculous technical tip try this:-

A couple of weeks back I was stuck for a glue brush, then remembered the collection of never-throw-away toothbrushes. Cut out one bristle cluster, sand to fit never-throw-away bristleless brush, and I was in business. *Chris Gow*

oOo

LONDON: Piltdown Hoaxer Identified Ever since Piltdown Man—once hailed as the “missing link” between man and primate—was debunked as a hoax in the early 1950s, a mystery has remained: Who was the joker who placed human skull fragments with an ape’s jaw—stained to look old—in the gravel pit in southern England where they were discovered in 1912? Last week British paleontologist Brian Gardiner announced that he and Natural History Museum researcher Andrew Currant had identified the culprit: Martin A.C. Hinton, a now deceased curator of zoology at the museum. The proof? Stained bones found in a trunk marked with Hinton’s initials in the museum attic



Was this “missing link” forged for spite?

were practice forgeries, Gardiner says, for the Piltdown hoax. So why did Hinton do it? According to Gardiner, he set out to dupe a colleague, Arthur Smith Woodward, with whom he had had a falling-out. Smith Woodward proceeded to stake his reputation on the authenticity of the Piltdown Man. Says Gardiner with a chuckle: “It just shows that if you want to believe something, you do.”

Time June 3

PALAEONTOLOGY ON THE INTERNET - WWW.

I lifted this useful bit of info off the internet for those members who have access to e-mail and who may wish to subscribe to any one of the "palaeo-interest groups" - Ed.

Palaeontology Internet Mailing Lists by Glen J. Kuban

When you join the following Internet "mailing lists" all e-mail messages sent to the group are automatically forwarded to your e-mail box (and all other subscribers). Joining or "subscribing" to these groups simply means that you have signed up to send and receive messages; there is no extra cost beyond the normal charges of your Internet service provider. Once you subscribe to a list, it is customary to send a brief message to the group introducing yourself and describing your interests. In the instructions below, where you see the phrase "firstname lastname" just replace it with your real name. Each group to subscribe to will send you an "Intro" or "Welcome" message explaining how to "Unsubscribe" or suspend your mail when desired (such as when you go on vacation). Be sure to save the introductory messages for future reference.

1. PALEONET

This is a mostly professional-level forum for the paleontological community. It includes several more specific list servers for Collections and other topics. It was started in 1995 and is still under development, with light traffic.

I find the PALEONET chat group very useful and informative and I would suggest that members who regularly use e-mail should subscribe to it on a trial basis for at least a month or two to get a feel for what is covered in their discussions - Ed.

To Subscribe to PALEONET (note spelling!) send the message:

subscribe PaleoNet firstname surname

This command should be typed on a single line of an e-mail message and sent to the PaleoNet Server Address: **Listproc@ucmp1.Berkeley.edu**

The command should be followed by a carriage return and there should be NO other information included (e.g., no signature text). Do not type any other text (eg., your e-mail address) on the command line. Listproc will strip all additional information (like your email address) it needs from the header of your incoming message. Before subscribing, you may want to check out their WWW page. All the PALEONET info, and MUCH MUCH more, is provided here:

EAST in UK - <http://www.nhm.ac.uk/paleonet/>
<http://www.nhm.ac.uk/paleonet/Listservers/PaleoNet.Html>
WEST in US - <http://www.berkeley.edu/Paleonet/>

Unsubscription

There are two commands subscribers can use to permanently remove themselves from the PaleoNet list:

unsubscribe PaleoNet OR **signoff PaleoNet**

2. VERTEBRATE PALEONTOLOGY LIST

To subscribe, send the message:

subscribe vrtpaleo firstname lastname to listserv@vm.usc.edu

3. ROCKS-AND-FOSSILS LIST

This is most active forum for fossil buffs and rockhounds. Most members are amateurs, but many teachers, paleontologists, and dealers also participate. Topics include collecting sites, specimen preparation and identifications, show announcements, museum and club info, literature and Internet sources, etc.

Be prepared for 10 to 20 messages per day. To subscribe, send e-mail to:

Majordomo@world.std.com

and in the body of the message enter:

Subscribe rocks-and-fossils firstname lastname

4. DINOSAUR LIST

This is the most active mailing list on dinosaurs and related creatures (pterosaurs, plesiosaurs, etc.). Subjects range from dinosaur classification and nomenclature to evolutionary relationships, literature, meeting announcements, questions and answers, philosophical debates, etc. The discussion is more academic than in Rocks-&-Fossils, and the majority of members are professionals, but many amateurs participate also. Expect about 15-20 messages per day. There is a "Digest" option (recommended) which groups multiple messages into one larger message, thus avoiding mail box clutter. To subscribe send e-mail to: **listproc@lepomis.psych.upenn.edu**

with the phrase: **subscribe dinosaur firstname lastname**

entered in the body of the message. To use the Digest option, after receiving your subscription confirmation send the message:

SET DINOSAUR MAIL DIGEST to

LISTPROC@lepomis.psych.upenn.edu

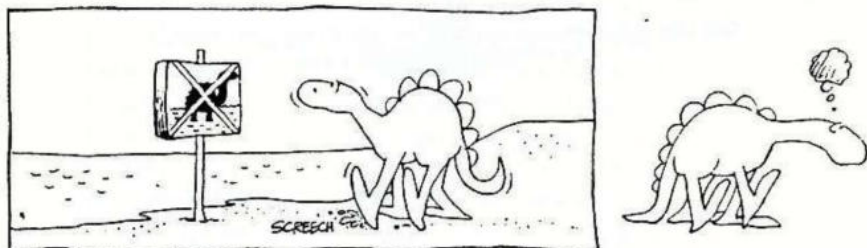
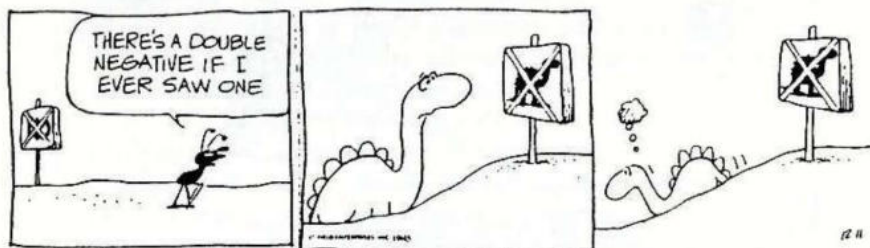
5. FOSSIL-NUTS LIST

This mailing list is similar to Rocks-and-Fossils, but is for fossils only. It is newer and less active, but growing in popularity. To subscribe, send e-mail to:

oyvind.hammer@notam.uio.no

and in the body of the message ask to be registered as a subscriber.

oOo





"We have a choice - we can let them evolve into human beings,
or we can eat them for lunch."

Tailpiece

A tourist visited a museum and looked at the bones of a dinosaur. He asked an attendant how old the bones were. "Exactly one hundred million and three years, sir," said the attendant.

"How can you be so definite?" asked the tourist.

"Well, sir, a geologist told me they were one hundred million years old, and that was three years ago."

PSSA members on e-mail

I have started to keep a PSSA membership E-mail address list. This list will be updated on a regular basis as I receive new or changed addresses. Send to amwd@giraffe.ru.ac.za That's me, Ed.

Dr Eric Anderson	ihma@guppy.ru.ac.za
Dr Graham Avery	bcage@uctvax.uct.ac.za
Patrick Bender	tmuseum@iafrica.com
Dr Lee Berger	055lrbs@chiron.wits.ac.za
James Brink	nmjsb@rs.uovs.ac.za
Dr Anne Cadman	106CAA@cosmos.wits.ac.za
Dr Anusuya Chinsamy-Turan	achinsam@nv1.samuseum.ac.za
Dr Arthur Cruikshank	aric1@leicester.ac.uk
Dr Billy de Klerk	amwd@giraffe.ru.ac.za
Dr Chris Gow	106GOC@cosmos.wits.ac.za
Pippa Haaroff	phaarhoff@nv1.samuseum.ac.za
Prof AV Hall	avhall@uctvax.uct.ac.za
Prof Eric Harley	harley@chempath.uct.ac.za
Dr Norton Hiller	nhiller@cantmus.govt.nz
Madel Joubert	mjoubert@samuseum.ac.za
Dr Herbert Klinger	hklinger@nv1.samuseum.ac.za
Dr Kevin Kuykendall	055klks@witsvma.wits.ac.za
Elizabeth Latimer	106eml@cosmos.wits.ac.za
Johan Loock	geoci@rs.uovs.ac.za
Dr David Norman	dn102@esc.cam.ac.uk
Dr Gideon Rosouw	zlagjr@zoo.upe.ac.za
Dr Bruce Rubidge	106gar@cosmos.wits.ac.za
Prof Izak Rust	glaicr@orca.upè.ac.za
Dr Friedmann Schrenk	schrenk@hrzpub.th-darmstadt.de
Dr Brigitte Senut	bsenut@cimrsl.mnhn.fr
Dr Russell Shone	glarws@orca.upe.ac.za
Dr Roger Smith	rsmith@nv1.samuseum.ac.za
Dr Francis Thackeray	mrsples@global.co.za (I like it!! - Ed :)
Dr Juri van den Heever	javdh@maties.sun.ac.za
Dr Anne Warren	zooaw@zoom.latrobe.edu.au
Dr Johan Welman	nmjw@rs.uovs.ac.za

Happy cyber-surfing. :)

CONFERENCE

*** 9th PSSA Conference**

Stellenbosch University, Western Cape, *23 - 27 September 1996*

Contact: Dr Juri van den Heever, Dept. of Zoology, University of
Stellenbosch, STELLENBOSCH 7600,
Tel: (021) 808-3223/36 Fax: (021) 808-4336
808-9111 e-mail: javdh@maties.sun.ac.za

Reminder

Deadline for contributions for the next issue of PAL NEWS is

30 November 1996