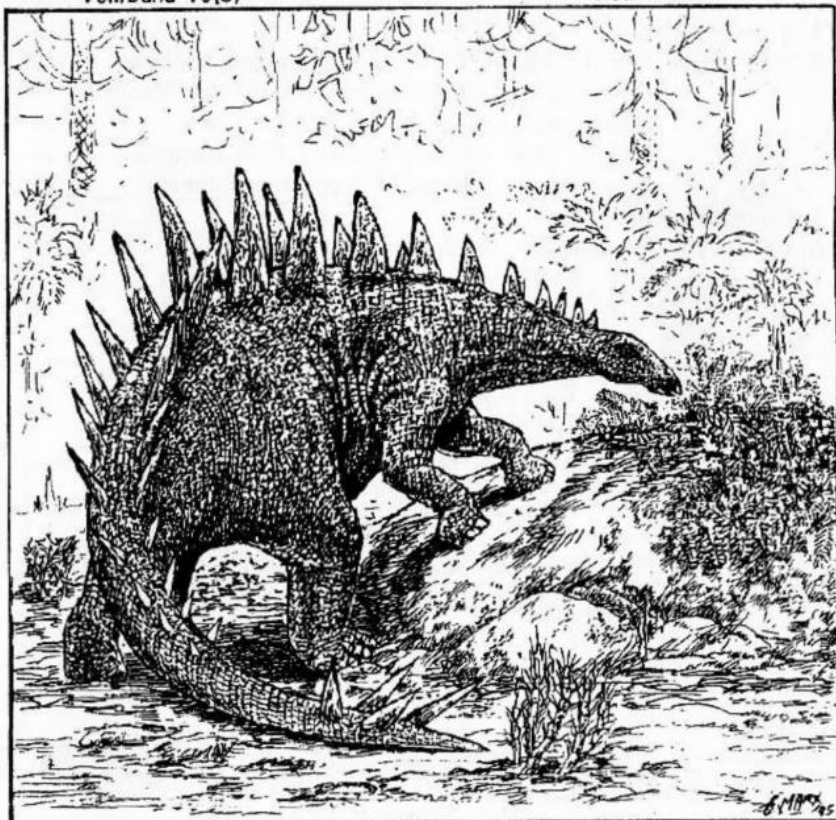


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NEWS  
**PAL** NUUS

Biannual newsletter of the Palaeontological Society of Southern Africa  
Halfjaarlikse Nuusbrief van die Paleontologiese Vereniging van Suider Afrika  
Vol./Band 10(3) Dec. 1995



*Paranthodon*, the first dinosaur to be found in South Africa - 1845.

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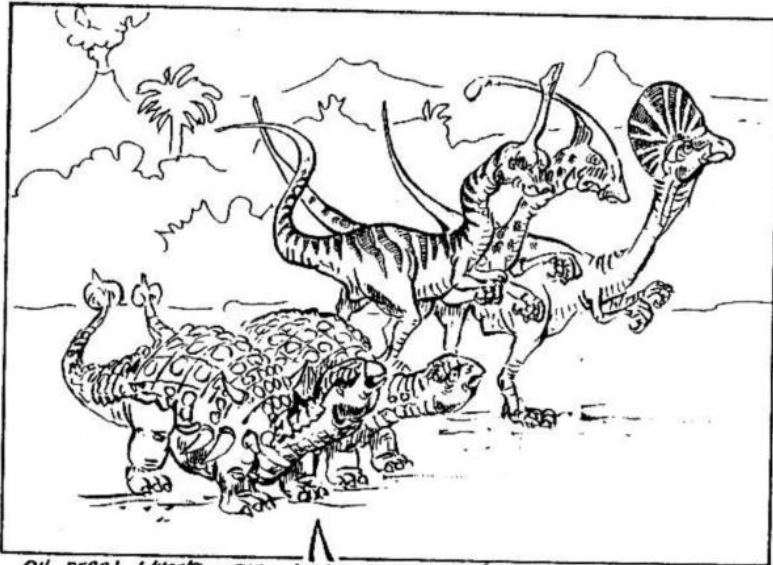
### Front Cover:

Reconstruction of *Paranthodon africanus*, the first dinosaur fossil to have been found in South Africa in 1845. A life-size reconstruction of this stegosaur is now on display in the Albany Museum, Grahamstown (see p.21).

## FROM THE EDITOR

Greetings in 1996!

I trust that you are all rested, refreshed and rearing to get your teeth into matters palaeontological after the festive break. This year we again meet for the 9<sup>th</sup> PSSA Conference in Stellenbosch in September (see p.32) so those who are planning to present a paper or poster should start thinking along these lines fairly soon. By the time the Conference and the Biennial General Meeting takes place I would have produced 8 issues of Pal News and I feel that it is time to step down and hand over to a new editor. Please start scouting around for somebody who would be willing to take on the job. *Ed.*



OH DEAR! WHAT'S THE WORLD COMING TO?... I CAN ONLY PREDICT  
A DISASTROUS FUTURE WHEN I LOOK AT TODAY'S YOUNGSTERS!

### News from Brigitte Senut - Muséum National d'Histoire Naturelle, Paris.

At the moment, Brigitte has just completed a study of the first primates known from Botswana (Plio-Pleistocene site of Koanaka Hills, Northwestern Botswana) and several papers in collaboration on the South Namibian Neogene fossiliferous sites and the site of Bosluis Pan in South Africa. On the other hand, the Pedetidae from Arriesdrift (Base of the Middle Miocene of Namibia) are under control and the study of the Macroscelids from the Sperrgebiet has begun. A paper on the fossil eggshells and the aeolianites of the Namib Desert has been presented at the Xth Conference of the Geological Society of Africa, which was held in Nairobi from 9th to 13th October.

A Franco-South African palaeontology expedition has been organised by Martin Pickford and Brigitte Senut in collaboration with the Transvaal Museum (Dr N Rautenbach) under the umbrella of the French Embassy (Service Culturel, Scientifique et de Coopération, Monsieur J de Monès). The aims of this project are 1. - to carry out palaeontological field work in Neogene deposits of South Africa in collaboration with South African scientists and 2. - to enhance scientific collaboration between France and South Africa. The latter aim will be accomplished by arranging exchanges of scientists and students between the two countries. South African students and scientists wishing to take advantage of this programme, either for short term study visits to France, or for long term studies at a French University (degree courses for example) should contact the Director of the Transvaal Museum or Martin Pickford/Brigitte Senut at the Laboratoire de Paléontologie, 8, rue Buffon, 75005, Paris (fax 33 1 4079 3580).

*Brigitte Senut*

oOo



**News from Arthur Cruikshank - Leicester, UK.**

It being true that it never rains but it pours... Last July (1994) the Peterborough Brick Pits (Middle Jurassic, Callovian) yielded up another pliosaur. We could not place it easily in any taxonomic notch, but pencilled it in our minds as being possibly a juvenile *Liopleurodon* - the most usual carnivore from the Oxford Clay of them parts. It comprised a squashed skull lacking the bits behind its eyes, a parietal lower jaw and loads of teeth, plus most of the post-cranial skeleton. I did the skull preparation and Alan Dawn, who found it and who works as a volunteer in the Peterborough Museum, put the ribs and vertebrae together for a display. So I never got to see the body of the animal until going to P'boro to collect the really big *Liopleurodon* for Leslie Noe's PhD About a month ago...the thing turned out to be pachyostotic in a really dramatic way; turns out to be the second record of pachyostosis in pliosaurs (unless anyone knows different), there being a *Kronosaurus* in the Colombian Cretaceous with pachyostosis, but only published in the last few months. So we have new adaptive type for the Oxford Clay and a new adaptive type for the Jurassic. Reference is to the Journal of the Geological Society of London, January 1994, for a thematic set on the Oxford Clay, including its palaeoecology. Hurried publication in progress; co-authors DM Martill and LF Noe. Watch the space. I guess thats enough waffle for the present - the eggs are on the back burner, but I'm also editing a MS with Mike Taylor on torsional stresses in pliosaur skulls. I think this one will be some time in hatching.

My Aussie/New Zealand trip is now ON, and I can get a return via Johannesburg! So maybe a holiday to be planned? Serious palaeontology in Otago for a month (Ewan Fordyce Feb-Mar), lots of touring collections Mar-April, then three weeks in Perth with John Long, leaving early/mid May. *Arthur Cruikshank*



**News from Roger Smith, SA Museum - Div. of Earth Sciences, Cape Town.**

Lots of palaeontological news over the latter half of this year. Starting in July with a mid-winter, snow-capped trip to the southern Cape mountains with Fiona Evans (Stellenbosch Zoology, MSc.) to help her find Waaiport Formation fossil fish. Thanks to Roy and Lucy Oosthuizen for their hospitality and help in getting our eye-in to recognize the phosphatic nodules that contain the best preserved fishes. In Willomore and Laingsburg districts we measured several icy sedimentological sections of fish-bearing strata and documented the taphonomy of plant and fish fossils in all in-situ nodules. Fiona has since been doing more fieldwork in the Touwsrivier area.

August was extremely busy with taking 30-odd Friends of the Museum on a fossil trip to Fraserburg and having the proceedings filmed by a British-based TV company for the "Paleoworld II" series to be released on the Discovery channels of England and America. This will be a popular science "documentary" type of thing. Good fun for all concerned except I had to do all the talking which is not my forte.

Late August was spent with James Kitching finalising our Elliot paper and attending the BPI-50 symposium. Well done BPI, a really good day of pure palaeontology!.

From mid-September to mid-October I was based in Europe doing research, conferencing, lecturing and vacation. The first week or so was spent in London with Dr Sue Evans of the Dept. Anatomy, University College. We spent several days studying some of the reptile fossils that I had brought back from Madagascar last year. These have now been identified as *Barasaurus*, a type of procolophonid reptile previously described (in French) from a nearby locality in Madagascar. Interestingly they are closely related to *Owenetta* from the main Karoo Basin (*Cistecephalus* Ass Zone) and to (*Nyctiphruretus*) from Russia. The latter has an absolute age date of  $255 \pm 1-2$  Ma. A paper on the sedimentary environments and taphonomy of these fossils is in preparation and will be finalised after next years field trip.

We also revised and resubmitted our manuscript on a juvenile aggregation of *Youngina* (a Late Permian diapsid) and I was able to bring back this unique specimen. It consists of 5 miniature lizard-like skeletons lying in apparent hibernation position. This fossil will be put into our divisional research display in the near future.

Then up to the University of Newcastle for Society of Vertebrate Palaeontologists and Comparative Anatomists and Society of Palaeontological

Conservators Annual Meetings. The 1-day preparators conference was particularly rewarding in that I was able to discuss the feasibility of a reciprocal training arrangement with the Natural History Museum whereby we would exchange technicians for 1-2 months so they could master new and different fossil preparation techniques. This was followed by 4 days of oral sessions mostly by European Community researchers. Highlights included sessions on the bone-rich fissures of Scotland and Germany and the extraordinary preservation of pterosaur soft tissue in the lacustrine limestones of Bavaria and Brazil. The intense interest in vertebrate fossils in Western Europe compared to SA is demonstrated by the fact that a single cubic meter of Permian fissure filling, yielding only tiny therapsid bone fragments can sustain 10 or so PhD students whereas our 30 000 square kilometres of therapsid skeleton-rich Permian strata rarely attracts more than 4-5 students.

My presentation entitled 'The Palaeobiology of *Diictodon* a Late Permian dicynodont from the Karoo Basin, South Africa' was designed to demonstrate the scope and research potential of the South African Karoo strata. The audience response was encouraging and I was invited to fly, expenses paid, to Denmark to give an extended version of the talk to the geology/palaeontology students at the Geological Museum in Copenhagen. This I did just before returning to Cape Town.

Before flying to Paris, I joined the rest of the Museum contingent at the preview of the Africa'95 exhibition at the Royal Academy. This was a lesson in how to put on a really big exhibition in the traditional museum setting and is a triumph of organization and collaboration. I also took the opportunity of visiting the Natural History Museum with the express purpose of studying their new quadrupedal *Massospondylus* (a southern African dinosaur) mount which looks a lot more realistic than our bipedally mounted skeleton. On to the Museum Nationale d'Histoire Naturelle in Paris which is the only institute, other than SAM, with a collection of Madagascan reptile fossils. It was therefore important that I survey the entire collection for similar fossils to the ones that I had brought back and to document their exact localities. This proved to be difficult because there is no catalogue of this collection and the fossils are stored in locked draws beneath showcases in the public galleries. To open these draws I needed a new set of security instructions to be adopted and then I could only work when the gallery was closed. Despite the archaic facilities the palaeontology building is a hive of activity - mostly fish palaeontologists. In surveying the collections I made special records of the specimens that preserved complete abdominal pebble masses

to be used for an analysis of their provenance and function. Dr Bernard Batail, whom we have hosted on several occasions, was my contact there and he made my stay both worthwhile and enjoyable in spite of the Metro bombs and a national civil service strike. Dr John "Gogo" Long, the Aussie fish man happened to be visiting at the same time and was willing to show me some of his favourite watering holes. Thanks for the company John and congratulations on your new book - "The Rise of Fishes".

The last 2 days of my trip were spent in Copenhagen as guest of the Geological Museum. I gave a formal lecture on palaeoecology of the ancient Karoo followed by informal discussions with the geology and palaeontology students of Copenhagen University and the Geological Survey. The reason that I was asked to talk to the students was to demonstrate the value of interdisciplinary studies, something which is not encouraged by their highly departmentalised university structure. Laas Juul was there to show me some of the sights of Copenhagen and Jutland, thanks Laas!

In mid-November Annelise Crean, Paul October and I travelled up to Windhoek to do some fieldwork on the Mid? Triassic Omingonde Formation at Etjo and Waterberg. We were joined by Dr Roger Swart (NAMCOR) who kindly offered the use of his vehicle. Ten sweltering, thorn-ridden days later we had sedimentologically logged 380m of Omingonde strata and collected 8 fossils which will be arriving in Cape Town early in the new year for preparation. At the same time we were asked to assess what was needed to excavate the post cranial skeleton of an *Erythrosuchus* which was found in the Omoruru North River bed a couple of years ago. Dr Pickford supervised the excavation of the skull which is now on open display (unprepared) in the GSO museum, Windhoek. We have submitted a quote to the GSO Namibia which if accepted would mean we have some major excavating to do next July. Prof. Farish Jenkins Jr. and his team from Agassiz Museum, Harvard University will be joining us there for the first of two trips that they have planned to do to the Namibian Karoo basins.

Next up - Tom Mason and I will be writing up the paper on sediments and trace fossils of fossil oasis deposits from central Namib that has been hanging in abeyance. I'm getting into those therapsid coprolites and finding some very fascinating bone fragments- this should be next on the research calender. The P-Tr paper is out in 3P's v.117 p.81-104, and James and I have submitted our *Tritylodon* Acme Zone paper to the same journal. Thats it for now. *Roger Smith*

oOo



### News from the Palaeontology Section, Council for Geosciences, Pretoria.

Earlier this year Mr Adriaan Louw, a ranger in the Kruger National Park, discovered, an exciting fossil site within the reserve. Soon after it was reported Francois Durand went up to investigate and according to his first report, the bones that were found belonged to *Euskelosaurus* (see news clipping). Francois continued with his research on the Beaufort layers in Natal and also with his survey on both sides of the Limpopo River. The Zimbabwean part of the project is being done in collaboration with the Museum of Natural History in Bulawayo.

Johann Neveling, who completed his BSc (Hons) in palaeontology at Stellenbosch, joined the Section in January this year. He accompanied Francois on both excursions and made some very interesting discoveries. Johann is planning to enrol at the BPI for his MSc next year with a view to unravelling the mysteries of the *Lystrosaurus/Cynognathus* boundary in the upper Beaufort of the Karoo.

Barry Millstead is close to completing his study of the palynology of the coal-bearing sediments near Vereeniging and a manuscript is in the advanced stages of completion. Barry is also working on a publication at present for the SA Committee for Stratigraphy (SACS) in which all previously published palynology based on stratigraphic schemes are to be compared and correlated. It is hoped that this will lead to the development of a general palynostratigraphy for southern Africa. In addition Barry recently attended the XIII International Congress on the Carboniferous-Permian boundary which was held in Krakow, Poland. On the one hand it was a very useful and interesting experience in which much food for thought was provided, especially on the relationship between Gondwanan and Laurasian palynofloras of the Late Palaeozoic. It was, however, distressing to hear from such a wide cross section of people, from many countries, just what a depressing situation existed for palaeontologists in need of a job world wide.

In October, our African palaeontological ties were strengthened when Dr Joyce M. Singano and Mrs Emma Msaky, micropalaeontologists from the Tanzanian Petroleum Development Corporation in Dar-Es-Salaam, visited us in Pretoria. They came to consult with Barry in connection with part of an atlas of biostratigraphically important microfossils they are developing for southern Africa.

We are currently designing a new palaeontology database at the Council for Geoscience. This ORACLE programme will be a powerful, yet very user-friendly, tool for biostratigraphy and the cataloguing of collections.

*Francois Durand*

## Rare fossils found

### Game ranger's find in the Kruger Park

In what could be described as one of the most exciting discoveries in the past couple of years in the Kruger National Park and its surrounds, a game ranger from Pafuri in the northern part of the reserve discovered an area that was covered with rare fossils. Subsequent investigation indicated that the fossil bones, which are distributed in an area as big as two rugby fields, are those of the dinosaur *Euskelosaurus*. This herbivore, which was some 10m long and 4m high, lived between 200 and 220 million years ago in widely distributed areas of the ancient African continent.

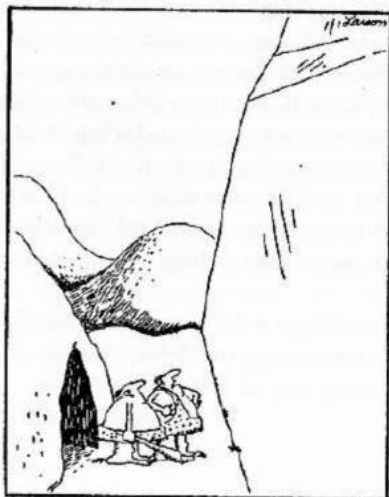
Not far from the site there is also evidence of fossil plants and trees to be found which are believed to come from an even older period. The area is situated a few kilometres from the Limpopo River, the border between South Africa and Zimbabwe and the controversial Modimbo-corridor.

This fossil find is also not far from Thulamela where since 1993 full-time archaeological excavations have been in progress. This is the first archaeological site in South Africa where gold was smelted on site. The discovery of Thulamela can be compared to that at Mapungubwe, just east of Pontdrift, during the 1930's.

Mr Adriaan Louw, a game ranger from Pafuri who regularly conducts game walks for visiting tourists was busy pointing out aspects of the local archaeology when one of his party pointed out a piece of fossil bone. The party then began to look for more bone and rapidly assembled a small collection.

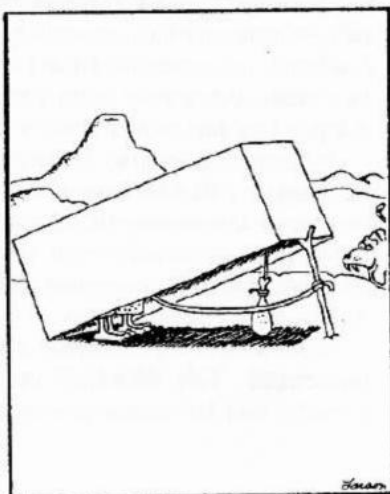
Last week Dr Francois Durand of the Geological Survey in Pretoria was asked to investigate the site further. He brought many of the bone fossils back to Pretoria where they will be more fully investigated in the laboratory. In 1993 Mr Johan Welman of the National Museum in Bloemfontein found and excavated a reasonably complete skeleton of *Euskelosaurus* from near Ladybrand in the Free State. This specimen also has the only skull of *Euskelosaurus* found to date.

Press cutting translated from Beeld, 5 Sept 1995



"Say, Thag ... Wall of ice closer today?"

000



"Shhhh, Zog! ... Here come one now!"

## **News from the Bernard Price Institute for Palaeontological Research BPI GOLDEN JUBILEE**

The second half of this year has been an active one for the BPI. To celebrate the Golden Jubilee of the Institute a one day symposium was held at Wits on 30 August with invited review papers given by palaeontologists who have been closely associated with the Institute as either a student, a member of staff, or member of the Board of Control. The morning session was devoted to Karoo palaeontology and sedimentology, and the afternoon covered more recent palaeontology. The presentations, which will be published in a special volume of *Palaeontologia Africana*, gave a good overview of the enormous contribution that the BPI has made to palaeontological endeavour in South Africa.

More than 120 delegates attended this occasion, which was rounded off by a cocktail party held in the BPI Museum and hosted by Professor J.P.F. Sellschop, Deputy Vice-Chancellor (Research) of the University. From the favourable comments of delegates it is evident that the event was enjoyed by all, and while reflecting on the past, it was also a meeting ground for old friends.

### **Morning Programme**

- Prof JFP Sellschop - Opening address  
Dr Bruce Rubidge - The BPI - 50 years of palaeontological activity  
Prof James Kitching - What was known about Karoo stratigraphy in 1945?  
Dr Roger Smith - Interpreting Karoo palaeoenvironments from sediments and bones.

Drs Heidi & John Anderson - Karoo palaeobotanical advances in the last 50 years

Dr Chris Gow - The quest for the origin of mammals

Dr Anusuya Chinsamy-Turan - Physiological implications of fossil bone microstructure.

Dr Colin MacRae - Answers blowing in the wind - contributions of palynology to Karoo geology.

Dr Rosemary Falcon - From fossils to fire - the BPI's role in the development of coal research.

Mr John Hancox - The role of fossils in interpreting the development of the Karoo basin.

### **Afternoon Program**

Dr Dick Rayner - Cretaceous fossils from the Orapa Diamond Mine

Prof Phillip Tobias - Early chapters in the history of the Makapansgat fossil hominid site.

- Prof James Kitching - Reminiscences of excavations at Makapansgat.  
 Dr Bob Brain - The contribution of Raymond Dart to the development of cave taphonomy.  
 Dr Andre Keyser - From Makapansgat to Drimolen - new discoveries in palaeoanthropology.

#### Evening

Prof Kitching & Dr Raath each delivered an informal lecture relating to the BPI, followed by a cocktail party in the Museum of the BPI.

#### BPI OPEN DAY

In a moment of intense magnanimity our Bossman, Bruce Rubidge, recently volunteered the services of staff and resident students to man an OPEN DAY. To this event the public was invited, and to our amazement they arrived, not in dribs and drabs as one sometimes sees during Regional Science Week, nor in scores as one might have expected, but in hundreds. Unfortunately we were not able to keep a head count, but we estimate that between seven and eight hundred visitors poured through our doors.

But back to the beginning. Bruce, ably abetted by Lilith Wynne of ARCSOC (Transvaal Branch of the Archaeological Society of Southern Africa) fame, jointly planned the Open Day to celebrate two events: the Golden Jubilees of the BPI and the Archaeological Society of South Africa. Accordingly Lilith did a splendid job of contacting the media, who in turn responded with dinosaur coverage that is seldom seen in our tabloids. The publicity was so successful that when O-Day dawned on 30 September, visitors were already queuing at 9 am for the 11.30 opening. We hastily called in the troops, and impromptu tours and talks commenced immediately, and didn't stop until 5 pm that afternoon.

The event proved to be popular beyond our somewhat modest expectations, to the extent that we were all initially at sixes and sevens. As the day wore on though, we became reasonably organised, largely due to the role that Helen Domleo (Chairperson, ARCSOC) played. She planted herself firmly in the foyer of our building, and spinning her arms like a traffic cop sent people in various directions. The "main attraction" was probably the lecture given by Bruce. His "Dragons of the Past" was scheduled to be given four times during the course of the day, but was so popular that he was obliged to deliver it twice more. This was in between taking tours through the fossil preparation room and fossil store room.

Prof Kitching was run off his feet in the fossil store, but I suspect that he secretly enjoyed showing off the treasures that fifty years of collecting have produced. Chris Gow, also in the fossil store, demonstrated, explained and fielded questions till he was hoarse. In the museum Joe Mncube and Elizabeth Latimer, with great fortitude and many sips of Coke, led tour groups past the displays. Alain Renaut was on hand to explain the mysteries of reptile evolution in the fossil preparation room, where *Caiphus Hlatshawayo* and Charlton Dube amazed visitors with their delicate preparation techniques.

The "plant people" played their role too, and an important one that was. Sue de Villiers packed hoards into the palynology laboratory, where she fascinated them with fizzing and spluttering rock samples. Marion Bamford and Ann Cadman on a more sedate level, showed visitors the marvel of fossil plants in the herbarium. For visitors who wanted something a little more subdued, video screenings of various National Geographic films were manned by members of ARCSOC.

While all of this demonstrating and lecturing was in progress, the foyer of the Van Riet Lowe building was abuzz with action as well. Here our masterpiece, the *Blockosaurus* (provocatively referred to as "Nando" by some) was on display. This was a product of dedicated team-play, in which Marion Duncan, Joseph Finck, Richard Lewis, Joe Mncube, Sue de Villiers (and her attachments, young Jenna and Richard), had spent several hours of the previous week crawling about on the floor, painstakingly constructing a bipedal dinosaur from "Better Blocks". These were kindly loaned to the BPI by Ian Coutts of that company.

A colouring competition (Dinosaur—what else?) for kiddies was held in the foyer as well, and various items were on sale. There were T-shirts, custom made by Sue for fossil enthusiasts, casts of various specimens made by Marion Duncan and Joseph Finck, postcards from the Rock Art Research Unit.

And while all this activity was taking place, Lilith and her able assistants from ARCSOC made and sold endless cups of tea and coffee, cookies and cold-drinks. The end of the day was celebrated in the usual manner, with all participants bubbly, not so much from the celebratory champagne, but probably more from the wonderful success that the Open Day turned out to be. Such a success, in fact, that the consensus was to make it an annual event.

## RESEARCH ACTIVITIES

Apart from festivities, some work has also been done. All the students have been busily working on their various Honours, MSc and PhD projects.

**John Hancox** is in the final stages of putting together his PhD on the palaeontology and sedimentology of the upper Beaufort-Molteno contact. **Elizabeth Latimer** has recently upgraded her MSc on rhinesuchid amphibians and is working hard at having additional material prepared. Her office is full of amphibian skulls from all over the country and even Germany - a rhinesuchid reunion. **Alain Renaut** has prepared several skulls of *Kannemeyeria* for his MSc and is currently writing up a revised cranial description of the genus. **Grigor Aitken** is also spending all his spare time, between his normal Science Faculty chores, to complete his PhD on the palynology of the Ecca and lower Beaufort in the Transvaal and Free State. **Sue de Villiers** is still busy photographing and identifying pollen grains. In the middle of December Sue is off to Paris to attend a Fauna, Flora and Sequence stratigraphy Conference at the Natural History Museum. This conference will be hosted by the Geological Society of France and several oil companies. **Lyn Meyer** has finished writing her honours exams, and is now rushing to meet the deadline for her projects.

**Bruce Rubidge** spent 2 weeks in Germany in July where he gave lectures at the Universities of Tübingen and Würzburg. He had a wonderful time looking at dicynodonts and dinocephalians in Tübingen, and Munich. In August he visited Beijing to attend the Mesozoic Terrestrial Ecosystems conference where he delivered a collaborative paper with Michael Shishkin and John Hancox. Michael was also at the conference and he and Bruce were able to tie up some loose ends on their various research projects started when Michael visited the BPI during the first half of 1994. While at the IVPP Bruce made use of the opportunity to look at the numerous dicynodonts in their care, and also some recently discovered "brithopid" dinocephalians discovered by Li Jinling and Cheng Zhenwu. More recently 2 weeks of fieldwork were undertaken at the Ecca Beaufort contact in the Richmond-Victoria West area together with a most enthusiastic team: Richard Lewis, and Caiphus Hlatwayo from the Beep, John Nyaphuli from the National Museum, Billy de Klerk from the Albany Museum and Neill Andrew from Plettenberg Bay. To begin with collecting was slow as eyes became accustomed to finding the rather scarce bone from the lower Beaufort, but in the last few days hauls became larger and all returned home content that the preparators can be kept busy for another few months.

Ann Cadman is still busy with contract work from Botswana and also modern palynology related to allergies for a leading pharmaceutical company. Ann and Sue have started a new project looking at the history of Compositae along the West Coast. Preparation for the 3rd Symposium of African Palynology to be held at Wits in September 1997 is well under way. Pre and post conference excursions are also being planned.

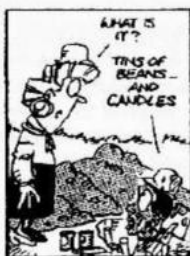
Marion Bamford has been looking at a wide variety of fossil wood from far afield and now is looking at extant woods for comparative purposes. The extant woods are so much easier to interpret - why do palaeontologists do things the hard way? Marion has also been involved with the palaeoclimate studies at Sterkfontein because fossil wood has been found with Little Foot!

Chris Gow is again finding time to investigate *Eunotosaurus*. Johann Welman's specimen has helped to clear up the configuration of the occiput, while Billy de Klerk has come up with a real beaut which has a complete hind limb and a partial hand. Thus we are as near as dammit to a complete osteology of this beast. Grateful thanks to all those patient souls who have loaned material. Even more exciting perhaps is that beneath Billy's specimen is a second headless skeleton of diapsid aspect. Chris reports that the beastie *Eunotosaurus* was clearly very turtle like in its habits, much like our common freshwater turtle in fact, but it is not a chelonian. As the first diapsids appear in the Carboniferous they have to be in the Tap zone. Go ye and find more.

We have a new and vital member of the department. Sherine Isaacs has joined us as secretary and she has the task of working closely with Bruce and dealing with all our requests too. Sunjay Baijnath is a temporary member and is a student helping Ann and Sue with their reference collections, etc. On a sad note, Stephen Moshabane, a preparator of many years experience, passed away a few weeks ago, after a long illness. We offer our condolences to his family.

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## MADAM AND EVE





# THE 50 000-YEAR-OLD TURNOFF

By ADRIAN BERRY: London

WHAT happened to Neanderthal Man, the mysterious race that populated Europe and the Middle East from 100 000 to 40 000 years ago and then just vanished?

Did our Cro-Magnon ancestors massacre them? Who were these brutish-looking, heavy-featured, strong-jawed creatures?

James Shreeve, an expert on early man, concludes that the extraordinary truth appears to be that our Cro-Magnon ancestors

co-existed with Neanderthals for 50 000 years and never had sex with them.

The reason for this is that they were not the same species — the definition of a species being that they are "reproductively isolated". If this definition applies, then the Cro-Magnons were simply not interested in the Neanderthals.

They ignored them socially and sexually, regarding them merely as uninteresting animals. — © *The Telegraph*, London

Wits Campus News 10/95

## 'Missing link' bones found

*A discovery of fossil hominid bones from the deepest part of the Sterkfontein cave deposit is the most important fossil hominid discovery from southern Africa in the past 18 years.*

"THESE 3.5m year-old fossils are the oldest signs of ancient human ancestors yet found in South Africa," said Professor Phillip Tobias, Director of the Palaeo-Anthropology Research Unit, when he announced their discovery to the world in July.

"They provide the first evidence that members of the human family were present in the sub-continent over three million years ago. It is the oldest set from anywhere in the world of four articulating foot-bones of a hominid, from ankle-bone to the metatarsal of the great toe. It provides evidence that the great toe of these early African apemen diverged appreciably from the other toes, was mobile and capable of

grasping movements as in chimpanzees. It also shows many features of the human foot and was clearly suitable for two-legged gait."

The bones were discovered by Dr Ron Clarke of the Palaeo-Anthropology Research Unit at Wits. Clarke, who is in charge of the excavation at Sterkfontein near Krugersdorp, was preparing for a new dig.

He was examining boxes of bones and fossils (thought to be of baboons and other animals) that had been recovered from one of the deepest layers of the Caves about 15 years ago, when he spotted an ankle bone. "This is not a carnivore — it's a hominid," he exclaimed.



The four bones are from the inner side of a hominid left foot. The joint surfaces are beautifully preserved and each bone articulates perfectly with the one in front of it. Thus they belong to a single foot from one individual.

Dubbed 'Little Foot', Tobias said it was the missing link that resolved the dispute over whether early African apemen were adapted to walking upright on two legs or whether they walked on four legs.

Clearly the early Sterkfontein apeman was able to walk on two feet. However it had a highly mobile big toe which was set at a wide angle to the other toes and was capable of grasping movements as in apes. Hence the Sterkfontein foot could have been used for tree-climbing (as in chimpanzees), but it was also well adapted for standing, walking and running on two legs.

The startling clarity of these features in the four bones of 'Little Foot' provides striking evidence that the human foot evolved from an ape-like foot.

Not only are the newly discovered fossils of importance because of their great age, but they throw astonishing light on how these early South African creatures stood, walked and ran, for the bones show an unprecedented blend of ape-like and human-like features. This is a world-unique discovery and the most important fossil find to be made in South Africa in decades. 'Little Foot' represents a new breakthrough. Our understanding of the origins of man has taken a great leap forward.

"It is 70 years since Raymond Dart revealed to the world the first of Africa's missing links — the Taung child, found not far from Kimberley. This latest find is the first major discovery to be presented by the New South Africa," said Tobias, "and it shows us that there are still immense prospects for new and very ancient finds to be made in the southern African sub-continent." □

## Staffie digs up dinosaur bone

LONDON — Jake, a Staffordshire bull terrier, dug up a 118-million-year-old dinosaur bone while sniffing about on the Isle of Wight, off the south coast of England.

The Staffie unearthed the four-foot long fossilised iguanodon arm-bone, while exploring on the beach with his owner John Winch, 27, an amateur fossil-hunter.

The discovery has turned out to be one of the most significant iguanodon finds in years. The bone belonged to one of the largest specimens yet found in Britain.

Scientists hope Jake's nose will lead them to the remainder of the iguanodon skeleton, which could be as long as 11 metres.

After consulting the local museum Mr Winch took the fossil home. He said Jake treated it as his own, even if he could not get his teeth around it. — Sapa-AFP

EP Herald 21/12/95

Weekend Post 19/8/95

## 'Ostrich-like' fossil find

CALGARY — Fossil hunters in western Canada have discovered the entire skeleton, of a 75-million-year old ostrich-like dinosaur.

The beaked and taloned animal belonged to the family of ornithomimids, or "bird-mimic" dinosaurs, palaeontologist Philip Currie said as he carefully chipped away the sandstone round the paper-thin skull bone.

"These guys look like ostriches without the feathers," Dr Currie said. "They're built to move fast."

His team made the discovery recently by "pure luck" in the Dinosaur Park, a UN-designated fossil-rich World Heritage Site 230km from Calgary.

The team found the perfectly preserved ornithomimid skeleton while breaking rock on the bank of a prehistoric streambed, in search of plant fossils. — Sapa

# The tooth marks the spot

By ROGER HIGHFIELD: London

A TOOTH estimated to be half-a-million-years old has been recovered from an important Stone Age site in Europe.

The discovery at the Boxgrove site, West Sussex, marks the finding of the oldest human inhabitant of England.

At the Boxgrove site, West Sussex, archaeologists have also found over 100 discarded flint hand-axes and the butchered and dismembered remains of rhinoceroses and horses, which were attacked by Stone Age Britons as they sought water.

The tooth, a lower incisor, was found 0.9m below the level at which "Boxgrove Man" was discovered — or at least his 500 000-year-old left shin bone — was discovered in December 1993.

The tooth was uncovered in August this year and was taken to London where it was identified as human.

"The implications of the discovery are twofold," according to Mark Roberts, a

director of the project. "Firstly, the tooth belonged to another individual.

"Secondly, the depth of sediment separating the two individuals means that they probably lived hundreds of years apart and thus it is the owner of the tooth who may now be described as the oldest Englishman or woman."

Because the scatter of debris Ice Age Britons left at Boxgrove when making their stone tools is so well preserved, their methods of construction, even the angle at which they hit the flints, can be reconstructed.

Geoffrey Wainwright, English Heritage's chief archaeologist, said: "The recent discoveries represent a major advance in the world-wide investigation of early humans."

English Heritage has not yet decided whether to back a new series of excavations at Boxgrove next year, said Dr Wainwright. — *The Telegraph, London*

*Sunday Times 10/9/95*

## News from Francis Thackeray - Transvaal Museum, Pretoria.

Things continue to hum in the Department of Palaeontology. We have had a stream of visitors, including a contingent from France. A Memorandum of Understanding was signed by representatives from the College de France (including Brigitte Senut and Martin Pickford), the French Ambassador, and Transvaal Museum staff. Already we have had two French visitors, Dominique Gommery and Jose Braga, working on hominid fossils in our collection.

Heidi Fourie is working on her Therocephalian Thesis. Francis Thackeray was invited by Don Johanson to serve on an Advisory Committee for a travelling display entitled "Hunt for Human Origins". This promises to be a very successful exhibition that will provide an opportunity to promote an awareness of Africa's palaeontological heritage.

Plans for an International Human Palaeontology Congress, scheduled for August 17 - 22, 1997, are developing. This Congress, the fourth to be held under the auspices of the International Association for the Study of Human Palaeontology, will be co-hosted by the Transvaal Museum and the University of the Witwatersrand. More information can be obtained from Dr Lee Berger, Secretary-General of the IAHP IV, Department of Anatomy and Human Biology, 7 York Road, Parktown, Johannesburg 2193.

*Francis Thackeray*

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## News from Norton Hiller - Christchurch, New Zealand

Applications for funding for further research at the University of Canterbury were not successful so I am currently Acting Curator of Geology at the Canterbury Museum on contract until June next year. There are major changes afoot in the staffing structure of the museum so who knows what will develop? In the meantime I am having fun getting to know the collections and learning about minerals and their conservation problems.

I have now completed the project I was doing on some Tertiary brachiopods from Australia and New Zealand and the manuscript is off to referees. One aspect of this work provided material for a talk presented at the 3rd International Brachiopod Congress in Canada which I attended in early September. While the conference was an unqualified success, I cannot say that I would recommend Sudbury, Ontario as a tourist destination unless you are into nickel mining. However, the post-conference field trip I joined took us to the delightful Manitoulin Island where we collected brachiopods from exposures of horizontal Late Ordovician - Early Silurian carbonate sequences. The little chaps were fairly jumping out of the rocks at us. What a difference with the bent and buckled Ordovician sediments I knew as a lad in the UK!

Further research on the Cainozoic brachiopods of New Zealand is planned and there is a possibility of doing some work on the Devonian fauna too.

### Recent publications:

1. ANDERSON, H.M., HILLER, N. and GESS, R.W. 1995. *Archaeopteris* (Progymnospermopsida) from the Devonian of southern Africa. *Bot. J. Linn. Soc.*, 117:305-320.
2. GESS, R.W. and HILLER, N. 1995. A preliminary catalogue of fossil algal, plant, arthropod, and fish remains from a Late Devonian black shale near Grahamstown, South Africa. *Ann. Cape Prov. Mus.*, 19: 225-304.
3. HILLER, N. 1995. Devonian chonetacean brachiopods from South Africa. *Ann. S. Afr. Mus.*, 104 159-180.

oOo

Norton Hiller



### News from Herbert Klinger - South African Museum, Cape Town.

In September I attended a symposium in Brussels on Cretaceous Stage boundaries. This has been one of the few symposia I have attended where everything ran as smooth as clockwork. Even more surprising is the fact that it was all done by one person, Annie Dhondt. The symposium consisted of two main sessions - one for papers and posters, the other for workshops for each individual stage of the Cretaceous System. What became very clear during these workshops, was that most workers could not agree on the taxonomy of the various possible zonal indices. This again highlights the need for straight-forward taxonomy. It is impossible to even think about defining the stages unless the systematics are sorted out. Well, all was not work. Belgium is famous for its 500 different varieties of beer and excellent food. We made a serious attempt to try as many of the gastronomic delights during our stay in Brussels. After the symposium we spent two days on the French coast at Cap Blanc Nez, just south of Calais. The exposures are massive chalk cliffs extending for several kilometres. Apart from the fossils, there were many interesting relics of WWII, including bomb craters, artillery bunkers and parts of, hopefully exploded, artillery shells.

After Brussels I flew over to London to see how my daughter was getting on waitressing in Wimbledon as well as to work with Jim Kennedy in Oxford. Jim had recently received lots of new baculitid material from the USA, and I spent most of my time studying these for our pending monograph. The preservation of this material is fantastic. Apart from showing details of micro-ornament on the shell, several specimens show signs of predation by arthropods and fish. Back in Cape Town I had to finish teaching at UCT and prepare for the subsequent end of the year exams. With all that behind me, perhaps I can get back to some ammonite work before the silly season starts. By the way, our librarian discovered six of Alex du Toit's personal diaries. There is very little geology in the entries, but the contents do give some indication of amount of work he managed to pack into each day, including the many miles he travelled each day on his bicycle.

*Herbert Klinger*

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# News from Billy de Klerk - Albany Museum, Grahamstown.

A theme in education and display that has been followed at the Museum throughout the year, and particularly in the past six months, has been - "The year of the dinosaur". The dinosaur in question being *Paranthodon africanus* the stegosaur which is now acknowledged as being the first dinosaur to have been found in South Africa in 1845 - 150 years ago. A highlight events at the Museum in the past couple of months has been the commemoration and publicity surrounding this anniversary and our exhibition artist, Mr Gerhard Marx, recently completed a full-scale reconstruction of *Paranthodon* in early September. In keeping with our palaeontology theme, we invited Bruce Rubidge, to present the annual Hewitt Memorial Lecture which was held on 11 September. The subject matter and title of his lecture, "Move over Jurassic Park - here comes Permian Park", proved to be a real draw-card as we had a full-house on the night. The lecture was preceded by a cocktail party in the (still being developed) palaeontology hall where the life-size reconstruction of *Paranthodon* was unveiled. At this gala event a philatelic first-day cover, commemorating the discovery was released and the new postal canceller for the Museum was commissioned. In future all letters posted from the Museum will be cancelled with the commemorative stegosaur logo.

While Bruce was in town I took full advantage of the opportunity and rushed him off into the field for most of the day to have a look at the lower Beaufort rocks and, in particular, the Ecca/Beaufort contact which occurs only some 30 km north of Grahamstown in the Great Fish River valley. I must say it is most convenient having these exposures so close to town. At the time Bruce invited me to join him on a field trip to look for fossils in the same stratigraphic sequence in the Richmond - Victoria West area of the Karoo during November (see BPI report). The public awareness campaign and focus on palaeontology in Grahamstown has already paid dividends. During mid September a local farmer (Mrs Lyn Phillips) brought a small fossil into the Museum for identification that she said had been found in 1987 on her farm "Bucklands" - adjacent to the Andries Vosloo Kudu Reserve in the Great Fish River Valley. She had originally thought that it wasn't particularly interesting as it looked like a "plant or trilobite" impression. I identified it as *Eumotosaurus* and unfortunately, as in most other specimens of this beastie, no skull was preserved. However, for the first time complete limb elements are preserved. This is an exciting find as it not only provides a better understanding of the anatomical detail, but it also extends the known extent of the Tapinocephalus and/or Pristerognathus zone of the lower

Beaufort by some 200 km to the east from Jansenville where the last Tap zone fossil has been reported. I plan to continue this investigation of the lower Beaufort fossil assemblage and the nature of the Beaufort/Ecca contact north of Grahamstown in the new year.

At the end of July I had the opportunity to travel to Cape Town for a short visit to the SA Museum to familiarize myself with their palaeontology displays and to see the extent of the Earth Sciences enterprise and the palaeontology collection. During mid August I spent a day at the offices of the Council for Geosciences in Port Elizabeth to pack (and document) their comprehensive collection of Eastern Cape invertebrate Cenozoic fossils that had been collected, for the most part, by Mr F.C. (Jokel) le Roux while he was working on his MSc prior to 1989. In time it is envisaged that this collection will be placed on display in the palaeontology hall as a catalogue of Cenozoic fossils found along the Eastern Cape coastal belt.

I have twice had the opportunity to travel up to the Johannesburg in the past couple of months and I took the opportunity to visit the gang at Wits - BPI (the "Beep" to some). My first visit coincided with the one-day 50th Anniversary Symposium of the Bernard Price Institute of Palaeontology and the accompanying revelry. Congratulations to Bruce and his colleagues on a most successful day. All those that attended this event experienced a wonderful day of palaeontology! While at the BPI I presented a talk/report on our mid-year Kirkwood field trip and also highlighted the 150th anniversary of the discovery of *Paranthodon* (we really seem to be milking this one!). On my second visit in October I was able to spend some time with Chris Gow and Bruce Rubidge and have a chat about the new specimen of *Eumotosaurs* that I mentioned earlier.

During mid August it was nice to again see Mike Raath back in Grahamstown on a two-day teaching spell at his *alma mater*. Mike presented a series of illustrated lectures and practical on aspects of Karoo vertebrate palaeontology to the 3rd year geology students at Rhodes University and I sat in on the course and "helped" out a bit with demonstrating (toy-toying?) during the practical. In the past six months I have also been presenting a lecture on "Interesting facts about the dinosaurs of the Eastern Cape" on the school circuit - mostly to pupils in standard 8 & 9 from St Andrew's and DSG, Victoria Girls High and Dale College.

In the previous issue of Pal News I reported that one of the highlights of our Kirkwood collecting trip during June/July was my find of a small skull that was thought to be of a bird. Well on his return to the US Dr Callum Ross did some

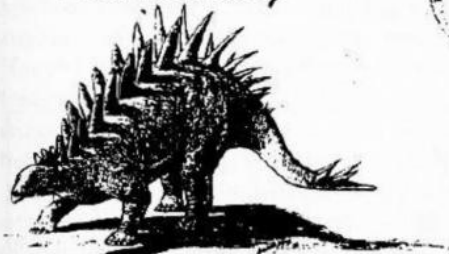


comparisons of this material with that in their museum collections and established that it was in fact not a bird, as originally thought, but a sphenodontid. A disappointment but never-the-less still an interesting find. The plaster-of-paris jacket around the large sauropod tail vertebra that we recovered from the Kirkwood cliffs was opened and the mudstone matrix then carefully removed revealing a most impressive specimen. Preliminary identification and estimates indicate that this single complete vertebra (centrum = 26cm long) came from about two-thirds down the tail of a Brachiosaurid which was at least 25m long! This fine specimen has now been placed on display in our new gallery.

Billy de Klerk

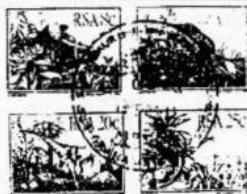
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150th Anniversary



*Paranthodon africanus* (Broom)

First S.A. dinosaur discovery (1845-1995)



150/190

Orders for 1st-Day covers that have been produced to commemorate the discovery of the stegosaur, *Paranthodon africanus*, 150 years ago can be place through me at the Albany Museum. Inside each envelope there is an insert with the full story of the discovery and a picture of the fossil.

Four types of covers are available (see illustration above):

1. Cover only (no stamps) - R2.50 (+85c postage) = **R3.35**
2. Cancelled cover with stamps from current issue R3.50 (+85c) = **R4.35**
3. Cancelled cover + minimum postage which includes one of the 1982 RSA Karoo fossil reptile stamps (values 8c 15c 20c 25c), the balance being made up of current definitive stamps - R4.00 (+85c) = **R4.85**
4. Cancelled cover + full set of 1982 RSA Karoo fossil reptile stamps (values 8c 15c 20c 25c) - R6.50 (+85c) = **R7.35**

News from James Brink - National Museum, Bloemfontein.  
Florisbad Quaternary Research Department.

The ESR and OSL dating programme of the Florisbad Quaternary site is now almost completed and we are now preparing the manuscript. In general the results appear to be internally consistent and the oldest deposits are much older than previously thought. We have been able to get a direct date on the molar associated with the Florisbad human skull. Preliminary results of this work were announced during the Pan African Congress in Harare recently.

Besides further excavations at Florisbad, the Florisbad Quaternary Research Department is continuing with fieldwork at various late Quaternary open sites in the Free State and at Cornelia, which is the type locality for Middle Pleistocene mammalian faunas. Recent finds at Cornelia include a rhino, equids, the ancestral form of the black wildebeest and hippo remains.

James Brink

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## Brooding link to the dinosaurs

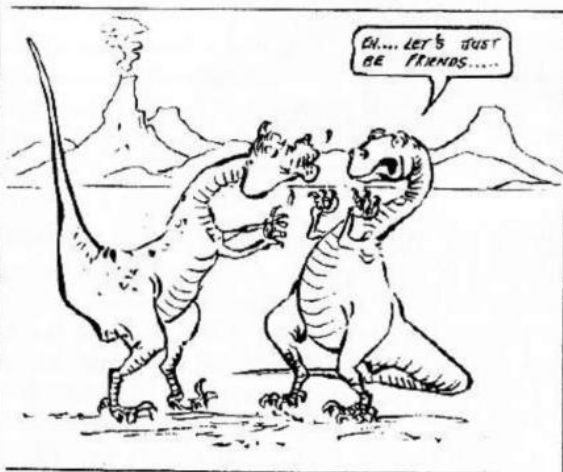
By ADRIAN BERRY

A FEMALE dinosaur fossil found in the Gobi Desert proves that modern birds are descended from meat-eating dinosaurs.

This is according to Professor Mark Norrell of the American Museum of Natural History in New York who is the co-author of a report published this week in the journal *Nature*.

The 80-million-year-old meat-eating oviraptor died while brooding over her eggs. "The dinosaur was crouched in a manner highly suggestive of the brooding posture of modern birds," Professor Norrell said.

"Many modern birds lost their ferocity when their later ancestors lost their teeth." — © *The Telegraph*, London



DINOSAURS DIED OUT DURING THE PLATONIC PERIOD



## DINOSAUR EGGS

*Here are two article that I found on the WWW at:*

*<http://ftp.geog.ucl.ac.be/~patrick/zhongguo/cpy/DinoEgg1.html> Ed.*

### **1. Dinosaur Egg Craze Grips China, Smuggling Rampant**

Avid collectors identify them with a lick of the tongue. They are fossilized dinosaur eggs, the latest craze in China where collectors are numerous and smuggling rampant, officials said Friday. The fad has led to the discovery by Chinese researchers of DNA (deoxyribonucleic acid) in one such egg, a find Chinese scientists hailed this week as a major advance for mankind that could add fact to the fictional hit movie "Jurassic Park," in which dinosaurs were brought back to life.

"History has given China a chance for a breakthrough in science," lead scientist Professor Chen Zhangliang told the Guangming Daily. The egg that supplied this week's breakthrough was found by a collector in Xixia county in Henan province in central China, a veritable mine of fossil nests and a mecca for treasure hunters, a local official said by telephone. "We have a higher concentration of eggs as well as more varieties than other places and they are better preserved," the secretary of Xixia's government office told Reuters.

Dinosaur eggs were first found in Xixia in 1993, he said. "The nests cover 80 square km (30 square miles) and we have found 5,000 fossils," he said. The discovery has brought problems, he said, but a campaign launched in 1994 by the Dinosaur Egg Protection Leading Group to prevent theft and smuggling has yielded results. "Since then smuggling cases have dropped," he said. Officials have even opened an exhibition hall in Xixia, 620 miles southwest of Beijing, for more outstanding finds, including donations from local farmers and eggs confiscated from smugglers.

The China Youth Daily reported the arrests of three young men who were recently caught trying to smuggle four dinosaur eggs out of Xixia. They bought the eggs for \$6 each and were counting on multiplying their investment. The eggs are big business in China, where private trade flourishes despite government protection and an export ban. At a free market for antiques in Beijing, vendors uncover heaps of the irregular, blotchy, sand-colored spheres hidden under grubby cloths, offering them to prospective buyers. To identify a real egg, one should lick, or drip water, on the surface, scientists say. The porous nature of a fossil will absorb the water while a rock will not.

Dinosaur finds have been announced thick and fast in China recently. Archaeologists in Henan, also in the central part of the country, stumbled across China's largest dinosaur egg, which rolled out as they walked past farmers shoveling soil near Lingbao city. The egg, 21 inch in circumference, dated from the late Cretaceous period (100 my ago).

Palaeontologists at Henan's Zhengzhou University announced last month they had used gamma rays to photograph the embryo inside a fossilized egg discovered in Henan. The image revealed an embryonic skeleton. In southern China, a team of Chinese and German scientists say they might have found a clue to the disappearance of the Jurassic-era giants, a diet imbalance traced to the diseased shell of fossilized eggs that may have upset reproduction.

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## **2. DNA in a fossilized dinosaur egg, found in Henan province, China**

Dinosaur DNA may open door to past, scientist says

(News Release 4010, 27/03/1995).

The Chinese scientist who says he has discovered DNA in sticky pulp from a 65-million-year-old fossilized dinosaur egg said Saturday the find opened a gate for man's research into the past. Speaking for the first time since China this week announced his find, molecular biologist Chen Zhangliang told Reuters he believed the discovery had the potential not only to unlock the mystery of the disappearance of dinosaurs but also to clone a gene.

"This opens a gate for modern biologists, archaeologists and palaeontologists to carefully study ancient life," said Chen, a 34-year-old graduate of Washington University in the United States and head of the college of life sciences at prestigious Beijing University.

"We could open the genetic secret to understanding ancient life ... how dinosaurs lived and survived," he added during an interview in his laboratory. However, he said longer strands of DNA or complete dinosaur cells would have to be found before he could add fact to the fictional hit movie "Jurassic Park," in which dinosaurs were brought back to life.

"This is absolutely different from 'Jurassic Park,'" he said. "Baby dinosaurs are not going to be running down Tiananmen Square." In U.S. director Steven Spielberg's thriller "Jurassic Park," dinosaurs were brought back to life by cloning a sample of DNA.

Chen said he only decided to go public with the breakthrough research after

three months of tests, many of them through the Internet worldwide computer link, and after repeating all the tests to ensure the DNA was really that of a dinosaur and not some outside intruder. "We had to be sure ... or I would be killed," he laughed. "Anyone will say this egg is 65 million years old how do you know it has not been contaminated?"

The tests had ruled out the possibility that the DNA could have come from ancient or modern bacteria or fungus, from other vertebrates or from humans who had handled the egg after it was found, he said. The egg in question was found by fossil collector Li Guanglin in Henan province in central China, where thousands of dinosaur nests have been unearthed since 1993, said geologist Zhang Yun who extracted the gene material from the egg.

Li dropped the egg in late 1993 and it split open to reveal a softish center, prompting the puzzled collector to approach the government, who brought in Zhang Yun. Zhang said he obtained 90 mg (0.003 of an ounce) of spongy cotton wool-like material from the egg, and after burning a small part established that the matter was organic.

"This was very unique," said Zhang, who checked 5,000 eggs. After analysis showed presence of amino acids, he called in Chen's molecular biology skills. Beijing University decided finally to unveil its findings because of fears the news would leak out and because the scientists believed it was time to bring international expertise into furthering the next stage of their research.

*More information at WWW site:*

*<http://www.ifcss.org:8001/www/pub/org/cal-aic1/index.html>*

## Police crack egg ring

SHANGHAI — Three Chinese men caught selling dinosaur eggs to a Hong Kong businessman were jailed for up to 5½ years by a Shanghai court yesterday, the Xinmin Evening News reported.

Zhuang Weimin, 60, bought 16 dinosaur eggs in Henan province and together with two accomplices arranged their sale in Shanghai for R2-million, the paper said.

Zhuang was found guilty of violating laws protecting Chinese cultural relics.

*EP Herald 8.8.95*

## Early bird

LONDON — Researchers working in China say they have found the remains of the first bird with a beak, and the discovery could point the way to the earliest bird of all.

They named the bird *Confuciusornis sanctus*, after the ancient Chinese philosopher. It was reportedly between 137- and 142-million years old.

*19.10.95*

## PALAUVER

*This column gets its name from the verb, palaver, "to discuss, to jaw" (O.E.D): it is a column in which anybody can chew on any subject, just as anybody can (if they dared or cared) on Hyde Park Corner in London.*



### "PALAEOPAIN: A Report from the Dark Side"

- Eric Anderson

Scientific fraud as a violation of basic social responsibility is always a painful thing to experience. I'm reminded of Francis Thackeray's elegant discussion of the Piltdown Man hoax of 1912 (Pal News, July 1991).

Two recent news items in this vein have crossed my desk that I offer up here for your perusal. Both involve antisocial or disturbed behaviour on the part of palaeontologists and offer results that would be laughable if they weren't so painful.

Readers may recall the recent sad history of Himalayan palaeontology involving a long-time fraud perpetrated by Indian geologist V. J. Gupta of Panjab University. Prof John Talent of Macquarie University, N.S.W., broke this story in 1989 in Nature (London) and Gupta was charged with data fabrication by salting specimens, recycling them in publications, plagiarism, and duping co-authors. The case, by June 1994, had been finalized and Gupta found guilty. Three co-workers who faced the inquiry were found innocent (can you imagine their anguish?).

But, Prof. Talent reported in the Dec. 1994 Ichthyolith Issues (Brisbane) that Gupta was virtually let off the hook by the university's Academic Senate. He was allowed to keep his post and university degrees but denied further increments. Talent elaborated that the two-year-long battle to establish fraud simply amounted to a waste of the university's money and ruined its prestige. As South African science turns to embrace new social challenges, I'd like to offer two quotes from Prof. Talent's above report, as follows:

*"The decision to let Gupta off so lightly strikes at the heart of an academic's most basic responsibility: on behalf of the community to intellectually nurture its progeny in the best and most intellectually honest way. What faith can the community have in the products of a system that virtually exonerates sustained fraud by its personnel?"*

*"The best one can say is that academics like those in the Panjab University Senate... are not equipped to deal with anti-social behaviour like that indulged in by V. J. Gupta in his 25-year enterprise. In general, academics are out of touch with the norms and ideals of the community outside their ivory towers. A more balanced evaluation of what Gupta has wrought, its implications for society, and what should be done about it, would have been obtained from an average audience in a picture theatre."*

Bears some thought, don't you think, what with the FRD's new stance on relevance, interaction and linkage?

Finally, the Annals of Improbable Research (AIR) has an E-mail version they pipe through the Internet, called "mini-AIR." AIR is billed as a science humour communication and "the journal of inflated research and personalities." Most of what comes along is pretty funny, and in light of the above depressing news, I pass along the following. How many of you have heard this one?

One Earle Spamer submitted a report to AIR: "The Okamura Fossil Laboratory." Seems that during the 1970s and '80s, a Japanese palaeontologist, Chonusuke Okamura, published a series of microphotographs documenting fossilized "minicreatures." All of these animals measured 1.0-1.5 mm. All of them. Included in this strange menagerie (and new taxa named) were miniinvertebrates, minidragons, a minibrontosaurus, a miniwoman (*Homo sapiens miniorientalis*) and a Silurian miniduck (*Archaeoanus japonica*). Perhaps not so much a case of blatant fraud as advanced psychosis.

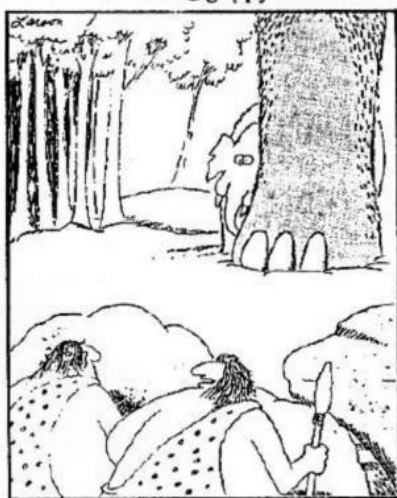
What's next?

Eric Anderson

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oOo



- 29 -

"Nai We got him now!"

## Technical Tips & Chatter

*Chris Gow has made an excellent suggestion that a new section be introduced into Pal News for members 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. To start the ball rolling here are two contributions, one from Chris and the other from me. Ed.*

### **Clogged up drawing pens.**

Rotring (and other) drawing pens are fine if used constantly, but if only used for a week or two scattered through the year they are an expensive pain in the dingsus. No matter how well one cleans them before each session they invariably clogged up or weep, adding to one's already considerable litany of frustrations. The answer is the new disposable jobs which, at only R12 each, are cheaper than a Rotring ink cartridge. There are a couple of brands. *Chris Gow*

### **Hardener/binding solution.**

During a recent field trip in the Kirkwood area Dr Cathy Forster from the State University of New York US (SUNY) noticed that I was using a diluted solution of "Glyptal" (diluted with acetone or lacquer thinners) to bind and/or glue fragmentary fossils before being lifted in the field. She said that Glyptal tended to "seal" the fossil and therefore any moisture trapped within the bone could effectively slowly "rot" the inside of the fossil away. She recommended a fairly new, and much cheaper, acrylic product which was now being widely used in the US palaeontological fraternity. It is called *Primal WS24 (SY27) - Acrylic colloidal dispersion* (dilute 1 part to between 4 & 20 parts water). She recommended a 1-4 or 5 part dilution. Cathy kindly left the 5 litre can that she had brought from the US with me and I will experiment with it in the new year. Any comments?

*Billy de Klerk*

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### 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.*

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*Happy cyber-surfing. :)*

## CONFERENCE

### **\* 9th PSSA Conference**

Stellenbosch University, Western Cape, 23 - 27 September 1996

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**Reminder:** Deadline for contributions for the next issue of PAL NEWS is  
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