

ISSN 0379-9336

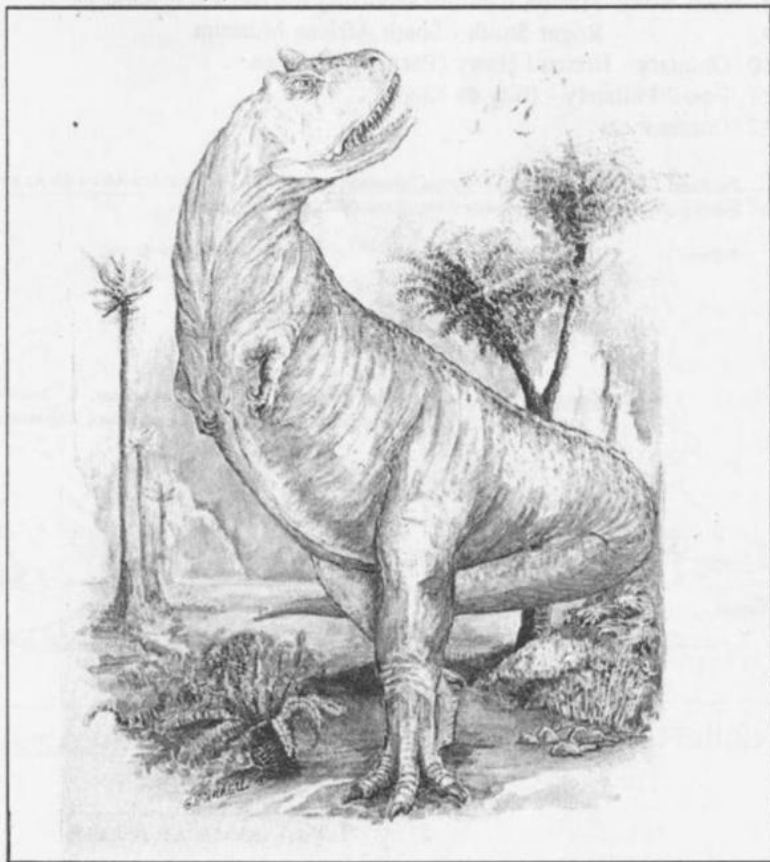
NEWS
PAL NUUS



Biannual newsletter of the Palaeontological Society of Southern Africa
Halfjaarlikse Nuusbrief van die Paleontologiese Vereniging van Suider Afrika

Vol./Band 9(4)

Jul. 1994



Carnotaurus, a 'horned' theropod dinosaur from Argentina (see p.8)

CONTENTS

1. Editorial	3
2. SAMA Conference, East London - Francis Thackeray	4
3. News from the Transvaal Museum - Francis Thackeray	5
4. Visit to the "Green Continent" - Brazil & Argentina, Mike Raath	7
5. News from: Bruce Rubidge - BPI Palaeontology	12
6. Eric Anderson - JLB Smith Inst. Grahamstown	14
7. From the press.	15
8. News from: Marion Bamford reporting for BPI Palaeontology	18
9. Roger Smith - South African Museum	21
10. Obituary - Bernard Harry (Barney) Newman.	23
11. Fossil Philately - Billy de Klerk	28
12. Conferences	30

Pal News / Pal Nuus is published by the Palaeontological Society of Southern Africa for its members. The views expressed are not necessarily those of the Society or its Officers.

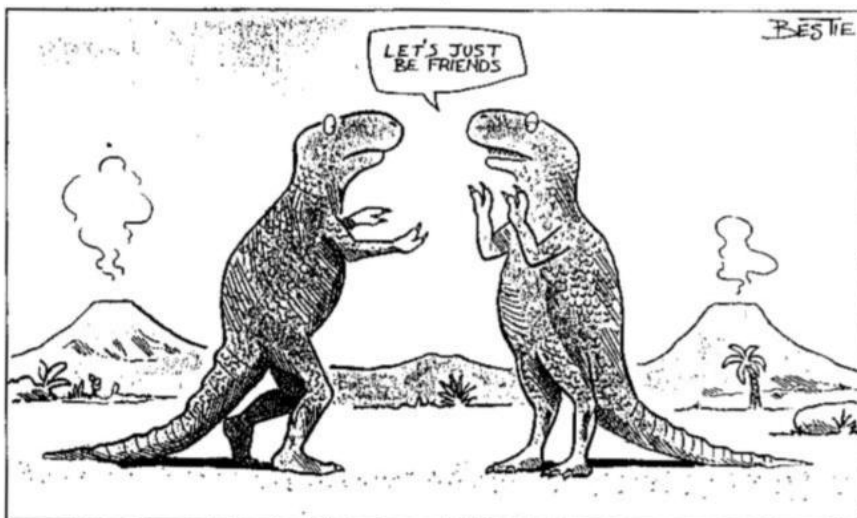
Editor: Dr Billy de Klerk (Tel. 0461 - 22312 Fax 22398)
Alhany Museum (email - amwd@hippo.ru.ac.za)
Somerset Street
GRAHAMSTOWN, 6140

Front Cover: Mounted reconstruction of *Carnotaurus*, a 'horned' theropod dinosaur on display in the Trelew Museum, Argentina.

EDITORIAL

Greetings to all of you who have a palaeontological bent!

My apologies for a somewhat late edition of Pal News but the pressures of organising the forthcoming PSSA'94 conference here in Grahamstown, and the fact that the production of this Pal News edition coincided with the Standard Bank National Festival of the Arts did not help much with my organisational ability. Many thanks again to those members who have diligently sent in their news, press cuttings, and odds and sods relating to palaeontology. I look forward to seeing those members who will be attending the PSSA conference in September *Ed.*



DINOSAURS DIED OUT DURING THE PLATONIC PERIOD

SAMA CONFERENCE, EAST LONDON.

The 58th SAMA (South African Museums Association) conference was held in East London in May 1994. Palaeontologists were represented by Mike Cluver, Mike Raath and Francis Thackeray. The main theme, "Towards a Charter for Southern African Museums", was discussed in several sessions, notably:

1. *Current initiatives on the structuring of South african Museums.*
2. *Museum communication.*
3. *Museum professionalism.*
4. *Museum collections.*
5. *Public relations and marketing*
7. *The preparation of a charter.*

In the first of these sessions, dealing with *Current initiatives on the structuring of South African Museums*. Dr Pauw and Dr J J Oberholzer presented summaries and discussion of a report which outlines a policy for South African museums. The "MUSA Report" is as yet not generally available, but Dr Pauw gave a brief outline of recommendations which were made in the document. Dr Andre Odendaal of the Mayibuye Centre commented on the report. The subsequent discussion was lively. Many criticisms were raised, but constructive criticisms can be used towards the realisation of the goal of the conference: the preparation of a charter for museums in South Africa.

No doubt a great deal of work still has to be carried out after the SAMA conference, but this can be expected to lead to the formulation of a charter, a set of principles, that can guide the development of South African museums into the next century. One of the matters brought up in discussion was the importance of the educational role of museums and museum staff. In particular, palaeontological displays at museums, and travelling displays, can contribute to an increased appreciation of evolutionary concepts, using South African fossils as examples.

I would like to thank Nancy Tietz and her organising committee for hosting a conference which was clearly an important one for South African museums.

Francis Thackeray.

oOo

News from the Transvaal Museum - Francis Thackeray

The Department of Palaeontology at the Transvaal Museum continues to be active in various projects. Fieldwork has continued at Kromdraai to expose more of the breccia adjacent the locality of the type specimen of *Paranthropus (Australopithecus) robustus*. Kromdraai excavations have been undertaken with Lee Berger and Colin Berger from Wits. Additional support for work at Kromdraai has recently been given by Harvard University.

Excavations have also been undertaken at Plovers Lake. Several primate crania were recovered from breccia in April, when Glenn Conroy and Tad Rusmussen of Washington University in St Louis, Missouri joined us.

There has been a great deal of interest in **Bob Brain's** book on Swartkrans, the culmination of more than 20 years' work at an important hominid site. The full title is "Swartkrans: A cave's chronicle of early man", edited by C K Brain, 1993. Transvaal Museum Monograph 8". It includes 13 chapters by Bob and his collaborators. Copies are available through the Transvaal Museum Bookshop, P O Box 413, Pretoria 0001. Bob is to be congratulated on his work at this particular site, serving as an example of excellence, not only in the field of palaeo-anthropology. We wish Bob well in his new endeavours on the other extreme of the spectrum of evolutionary studies. He is currently in Russia, and we look forward to his presentation at the PSSA conference in September.

Tim Partridge continued his excellent research on palaeoclimates in the southern hemisphere. As an indication of the respect which Tim has gained, he has been appointed on several international and local committees working on palaeoenvironmental projects. Unfortunately Tim submitted his resignation from the Transvaal Museum in December 1993, despite attempts to retain his association with the museum, something which Tim himself did not want to sever. I would like to express my sincere thanks for the many (ways) in which Tim has served the interests of the Transvaal Museum during his five-year term as Research Associate.

Ginny Watson is to be congratulated for the publication of three excellent papers, two of which were published in the monograph on Swartkrans edited by Bob. These include her analysis of the "Composition of the Swartkrans bone accumulations in terms of skeletal parts and animals represented". She is currently working on equid teeth from Wonderwerk.

David Panagos is due to retire in June 1994. His service to the Department and to the museum is greatly appreciated.

I have enjoyed working on measurements taken from KNM-ER 1470 (attributed by Bernard Wood to *Homo rudolfensis*) and "robust" australopithecines from South Africa. Part of this work is being published in a joint paper with Bernard Wood in the *Journal of Human Evolution*. It includes morphometric analyses of chimpanzees, gorillas and humans. We have used a very simple statistical method to assess the degree of similarity between specimens.

Future Plans

Plans for the immediate future include the following:

1. continuation of research projects which make use of the CT technique to study hominid fossils;
2. Continuation of fieldwork at Kromdraai and Plovers Lake;
3. Preparation of fossils from these and other sites;
4. Educational projects which serve to make the South African public more aware of the richness of South Africa's palaeontological heritage.

It is my long term objective to help encourage local South Africans to turn to palaeontology as a career, and to strive towards excellence, so that in 20 years time the Transvaal Museum and other institutions in the country can have strong palaeontological research centres, attending also to educational needs. This will be challenging but this challenge is faced with optimism and a willingness to serve the interests of all South Africans in the New South Africa.

oOo



A visit to the "Green Continent" - Brazil & Argentina: 25 Mar - 16 Apr 1994
Mike Raath - Port Elizabeth Museum.

Early this year I received an invitation from Dr Fernando Novas of the Natural History Museum in Buenos Aires, Argentina, to attend an international symposium on Gondwanan Dinosaurs in Trelew, Patagonia, in April.

On the way there and back I took the opportunity to visit Rio de Janeiro, Brazil, and Buenos Aires as well. In both Rio and BA I visited museums and zoos, to see what we at the Port Elizabeth Museum Complex might learn from them. I had also wanted to visit Sao Paulo, Brazil, because it is the only city in the world with a Snake Park older than ours in Port Elizabeth, but poor advice from our travel consultants meant that I could not do so without spending an additional thousand Rand just to get there from Rio. If I had been better advised it would have been a simple matter, as flights from South Africa to South America actually enter via Sao Paulo - not Rio, as I had been advised. I therefore actually ended up in Sao Paulo on four occasions, but each time as a transit passenger and I could therefore not disembark.

Rio de Janeiro

The museums of Rio are generally rather old and a bit run down. Some are housed in lovely old monumental buildings, but they are usually rather neglected on the outside. Street graffiti is a very big problem in Rio, with the result that few people bother about the upkeep of building exteriors, concentrating instead on what is inside.

The National Museum of Natural Science is located in the parklands of Quinta da Boa Vista, next-door to the Zoo. The building was once the palace of the Emperors of Brazil, and was converted to museum use in 1818. It is one of the oldest scientific institutions in Latin America. It is run by the University, and its displays are of the "exploded textbook" variety. Only one display was technologically modern - a very pertinent, but not very exciting, display on the importance of preserving biodiversity. With the speed at which Brazil is losing its biodiversity through destruction of its rain forest, this is a message that urgently needs to get through to all Brazilians, but I doubt if this particular display will do much to get the message across.

The museum has quite a large palaeontological exhibit on the first floor, most of it consisting of specimens from their Permian beds, with many very familiar Karoo forms of both plants and animals on display, and some quite bizarre mammals from their Tertiary and Quaternary continental deposits, including the huge carapaces of glyptodonts and beautifully preserved specimens of giant ground sloths.

A disturbing aspect of the palaeontological scene in Brazil is the trade in fossils which goes on in myriads of little gem and jewellery shops in the towns. I lost count of the number of shops in Rio that offer poorly prepared fossil fish and chunks of fossil wood for sale. Later at our conference in Patagonia a delegate from Brazil told me that this rape of Brazil's palaeontological heritage has reached sinister proportions in some areas. Evidently some "heavies" in the local communities in the areas where the fossil fish occur have been physically preventing scientists from visiting these areas to collect, on the grounds that these are their deposits and mining them is their livelihood, so hands off! I believe there have been some potentially ugly confrontations. The fish, although beautifully preserved, are often very crudely collected and even more crudely prepared, with all sorts of fanciful and creative embellishments added (or removed) by the "preparators". Prices in the shops range from a few Rands for itsy-bitsy scrappy specimens, to several hundred Rands for the more spectacular and complete specimens.

Buenos Aires

One of my strongest impressions of the museums in Buenos Aires is that they are much more integrated into the formal education system than ours are. Virtually none of them is open to the general public on weekday mornings, because that is when school classes use them.

The main museum which I wanted to visit, the National Museum of Natural Sciences, has a long history in palaeontology going back to before the turn of the century. Dr Fernando Novas, my host, works there. Its large palaeontological hall is excellent, and it is largely a tribute to the energy and skills of Dr Jose Bonaparte. Their dinosaur holdings are spectacular, and one especially rivetting specimen is the bizarre theropod *Carnotaurus*. This animal, with its paired bovid-like horns on its head, and its truly ridiculously reduced forelimbs, is almost unbelievably bizarre. In spite of its tiny forelimbs (the radius and ulna look more

like metacarpals!), it has a disproportionately large scapula and coracoid. Standing around the mounted reconstruction of *Carnotaurus* at the remarkable museum in Trelew (where the conference took place), the consensus of opinion among the gathered palaeontologists was that the scapula and coracoid must have served more for the attachment of powerful muscles moving the neck, and therefore the skull and horns, than for the manipulation of the puny reduced arms.

Patagonia

After Buenos Aires my next stop was the little town of Trelew in Chubut Province, Patagonia, where the conference was to be held. Trelew is roughly the size of Grahamstown and lies near the ecologically important Peninsula Valdez on the Atlantic coast of southern Argentina, where colonies of Southern Elephant Seals and sea-lions together with other forms of local wild-life, are protected in a large coastal nature reserve. Eco-tourism is a well developed and flourishing industry in this part of Argentina, most of it apparently domestic tourism rather than international. They go in for whale- and penguin-watching in a big way.

Trelew is one of those enigmatic and unexpected colonial settlements which seem to be so common in Argentina: it has a strong Welsh heritage which is preserved and practised to this day - the local phone book is full of Welsh surnames, but usually with Spanish first names, like Carlos Jones or Miguel Williams! Although it is such a relatively small and remote town, it boasts a specialised palaeontological museum which opened only four years ago. This museum is wholly privately funded, and most of its support comes from a syndicate of the local hotels and the tourist industry. It was host to the VIth Argentine Congress on Palaeontology and Biostratigraphy, and our International Symposium on Gondwanan Dinosaurs formed part of that congress. About 70 delegates from 13 countries attended. Apart from me, there was only one other representative from Africa, a Malawian who was actually a member of the delegation from the Southern Methodist University in Texas. I gave a paper on "The Earliest Dinosaurs of Central Gondwana", based on our work on the Molteno-age dinosaur tracksite at Maclear in the North-eastern Cape, and the work which I did a few years ago with Prof James Kitching and Dr Phil Oesterlen of the Geological Survey of Zimbabwe on a dinosaur bone found with Triassic rhynchosaurs in the Zambezi Valley. Other papers covered dinosaurs in Australia (Pat and Tom Rich, Ralph Molnar and Tony Thulborn made up the delegation from down under), Antarctica, Africa, South America (the bulk of the papers), and even Spain.

Unfortunately there were no representatives from India. The symposium was so successful that it was unanimously agreed at the end to try to repeat it on a four-yearly cycle, perhaps linked to the International Gondwana Symposium. The organisers are keen to hold the next one in South Africa.

The fossil displays in the museum are spectacular, including full skeletal mounts of six large dinosaurs, one of them being *Carnotaurus*. The piece de resistance, though, is not a dinosaur, but a Carboniferous spider, whose head and carapace measure nearly 40 cm across! Add the legs and you have something from your worst nightmare brought chillingly to life! What would Spielberg do with that!?

The state of vertebrate palaeontology in Argentina seems to me to be extremely healthy; probably quite a bit better than in South Africa- vide the private-sector support for the museum in Trelew. It struck me that there is room for a good deal of collaboration between South African and Argentinian palaeontologists, because the rich fossil records of the two countries seem to dovetail so neatly. From the informal chats I had with Argentinian palaeontologists during the social gatherings and coffee breaks, they are just as keen for this sort of collaboration.

Field Excursion to Cerro Condor, Western Patagonia

At the end of the conference two groups of delegates set off on field excursions to different parts of Patagonia, one to look at fossil plants, and one to look at vertebrates, especially dinosaurs. I took part in the latter excursion, a two-day trip to Cerro Condor ("Hill of the Condor") in western Patagonia, to see two rich Jurassic vertebrate fossil localities. One has yielded abundant well-preserved fish, and the other - the main reason for the trip - is an unusually rich dinosaur locality in the Canadon Asfalto Formation. In the past twenty years this has produced the virtually complete skeletons of eight dinosaurs, including two well articulated sauropods, *Patagosaurus* and *Volkheimeria*, and the large theropod, *Piatnitzkysaurus*.

The entire field trip took place in the arid and very Karoo-like interior of Patagonia, in which exposures are excellent. The beds have been subjected to a good deal of tectonic activity, and there is a fair amount of tilting and folding of the beds, and igneous activity all associated with the break-up of Gondwana when the south Atlantic opened up.

All in all it was a successful and very enjoyable trip, and I very much hope to return to South America in future. I also hope sincerely that it will be possible for us to host a follow-up symposium on Gondwana dinosaurs in South Africa. There are very interesting and exciting things happening on the dinosaur and bird-origins scenes, and nowhere more interesting or exciting than in South America.

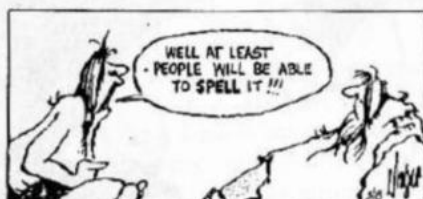
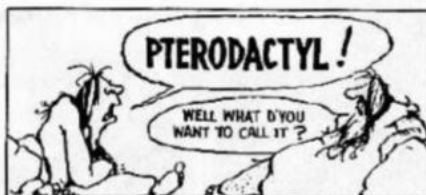
Mike Raath

oOo

HERMAN



Jim Unger

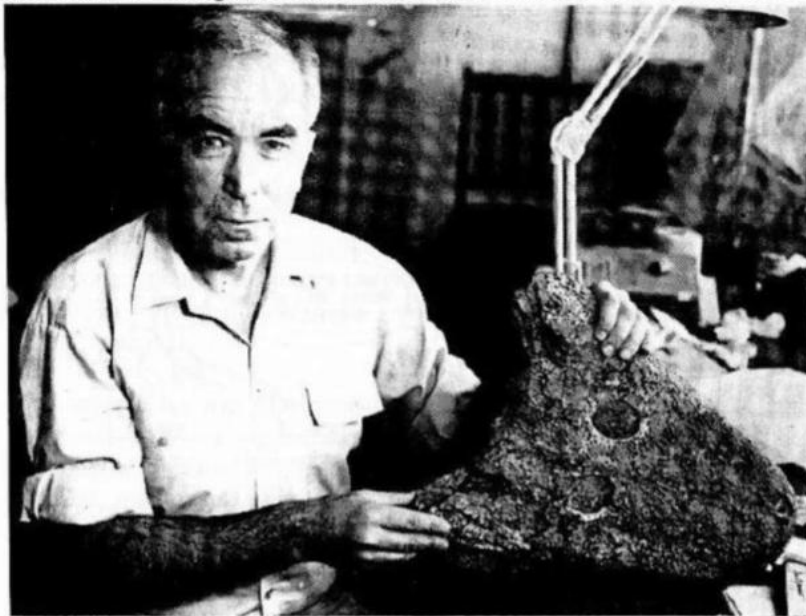


© 1981 Universal Press Syndicate. Reprinted with permission. All rights reserved.

News from Bruce Rubidge - BPI Palaeontology

The past few months at the BPI have been filled with a variety of activities. Early in the year John Hancox took me on a field trip to his study area in the Sterkstroom area where he has been involved in research on the rocks of the upper Beaufort and Molteno (Bamboesberg Member). This area is not rich in fossils but John's keen eye has managed to spot all the fossils that there are. Amongst his exciting fossil assemblage is a new large dicynodont, and an advanced capitosauroid amphibian. Apart from looking at fossils, John is looking at the bio- and lithostratigraphy of these rocks and will also be making palaeoenvironmental deductions. John and I also accompanied Bernadette Azzie, an honours student, on a short field excursion to her study area in the Senekal district where she is also looking at the fossils and rocks of the Upper Beaufort and Molteno.

Michael Shishkin (a specialist on Triassic amphibians) and his wife Eugenia (Genna) Sytcherskaia (a palaeoichthyologist) both from the Palaeontological Institute of the Russian Academy of Science in Moscow, have spent some time at the BPI. Genna was unfortunately able to spend only 3 months in South Africa, but in that time managed to look at most of the fossil fish material in this country.



Michael Shishkin with *Rhinesuchus* - a Permian amphibian.

A party of 5 palaeontologists (including Michael, Jenna, David Dilkes and Elizabeth Latimer and myself) went on a "specimen hunting" expedition to the collections of the National Museum and South African Museum. Jenna to look at fish, David to look at Rhynchososaurs, and Elizabeth and Michael to study fossil amphibians. Michael has been looking mainly at the Triassic Amphibians, while Elizabeth has embarked on an MSc on *Rhinesuchus*. My particular interest on this trip was to look at dinocephalians, and to complete a re-description of *Styracocephalus* with Juri van den Heever.

James Kitching took Michael, John and myself on a short but most instructive field excursion to his favourite *Cynognathus* Zone localities starting in the Free state in the Senekal - Paul Roux area, and ending off naturally at Winnaarsbaken in the Burgersdorp district. It was a wonderful experience to be out in the field with James again and we all benefitted a great deal from his wealth of experience.

On his way back to Chicago from Stellenbosch, Jim Hopson spent a rather hectic week in the PWV (for want of a better name) visiting the BPI, Transvaal Museum and Geological Survey. In the midst of all his other activities we managed to complete a description of the skull and postcranium of *Patranomodon*, a little therapsid from the base of the Beaufort which we consider to be the most primitive anomodont known.

Recent publications:

1. HANCOX P.J. & RUBIDGE B.S. 1994. A new dicynodont therapsid from South Africa: implications for the biostratigraphy of the Upper Beaufort (*Cynognathus* Assemblage Zone). *S.Afr. J. Sci.* **90**, 98-99.
2. KING G.M. & RUBIDGE B.S. 1993. A revision of the taxonomy of small dicynodonts (Therapsida) with postcanine teeth. *Zoological Journal of the Linnean Society*. **107**, 131-154.
3. RUBIDGE B.S. New South African fossil links with the earliest mammal-like-reptile (Therapsid) faunas from Russia. *S.Afr. J. Sci.* **89**, 460-461.
4. RUBIDGE B.S. *Australosyodon* the first primitive anteosaurid dinocephalian from the Upper Permian of Gondwana. *Palaeontology* (In Press).
5. RUBIDGE B.S., KING G.M. & HANCOX P.J. The postcranial skeleton of the earliest dicynodont synapsid *Eodicynodon* from the upper Permian of South Africa. *Palaeontology*. (In press).

oOo

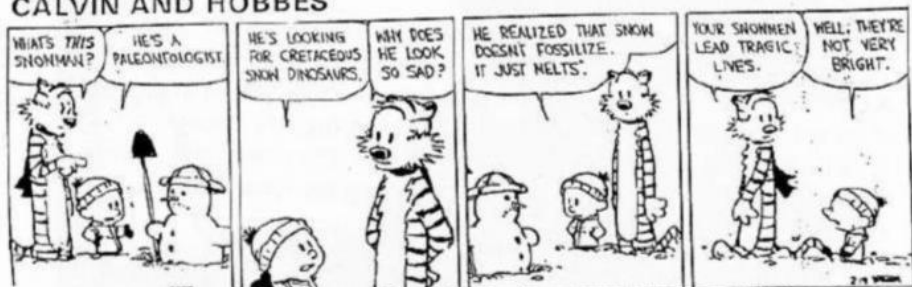
News from Eric Anderson - JLB Smith Inst. of Ichthyology, Grahamstown. Norton Hiller left Grahamstown for New Zealand in April, but promises to be back in time for the 8th PSSA conference here. Robert Gess has returned from overseas travels to excavate the Devonian lagoon site once again, but is now winding down due to the weather. Among Rob's overseas visits was one to the Western Australian Museum in Perth where John Long, our keynote speaker for this year's conference, gave advice on our fish specimens. John arrives in Grahamstown in early August and will spend a month helping identify and diagnose the fish material, then take part in the conference. His keynote address will be on the Devonian Gogo Station fishes of northwestern Australia, beautifully reconstructed (in 3-D) specimens that lived along an ancient coral reef.

Funds for continuing our dig were granted to me by FRD in the form of a Special Merit award earlier this year, very pleased with that, as we are continuing to find interesting material. I will present a session paper on the new fishes and Rob Gess will present a poster summarizing all the finds. In addition, the Albany Museum is preparing another, more commercial, educational poster on the Cape south coast Devonian habitats, based mostly on the Grahamstown finds, and we are all helping to design it. It will be in colour and is hopefully the first in a series in which we feature past southern African habitats, floras and faunas. Suggestions for these would be welcomed; please contact me or editor Billy de Klerk. So far we envision next the Dwyka freeze-up, the Permian of the Karoo, the Late Cretaceous of the Algoa Basin, and ancient hominids in Transvaal.

Eric Anderson

oOo

CALVIN AND HOBBS



From the press

Finding on Turtle Evolution

AN ancient, fist-size skull discovered in South Africa sheds new light on the turtle's evolution, establishing a link between the most primitive fossil specimens and modern turtles.

Dr. Eugene S. Gaffney, curator of the American Museum of Natural History's department of vertebrate paleontology, said the find he and a colleague are reporting revealed that major structural changes in the turtle's cranium occurred much earlier than had been believed.

"The oldest turtles had a mobile skull, whereas all modern turtles have an unusually solid skull," Dr. Gaffney said. Fossils of the most primitive known turtle, *Proganochelys*, which lived in the late Triassic period some 240 million years ago, show a flexible skull similar to that of modern birds.

Dr. Gaffney and his co-author, Dr. James W. Kitching of the University

of the Witwatersrand in Johannesburg, said that the fossil skull was from a previously unknown species, *Australochelys africanus*. Although it has much in common with primitive turtles, they said, the fact that its braincase is fused to its palate clearly marks *Australochelys* as a link between *Proganochelys* and modern turtles.

The researchers believe that evolutionary adaptations of the turtle's hearing mechanism may have precipitated the solidification of the skull evident in *Australochelys*. They reported their findings in the current issue of the journal *Nature*.

Dr. Kitching unearthed the skull in 1980 from a formation created in the early Jurassic period about 200 million years ago. Its discovery also extends the history of turtles in Africa some 60 million years, Dr. Gaffney said.



Extraordinary . . . Dr. Martin Pickford with a fossil eggshell. PICTURE: CHRISTINE VISSER

Namib sand dunes reveal clue to life 18-m years ago

■ SCIENCE WRITER

The ancient sand dunes of Roosklein in Namibia promise to yield a fairly complete picture of life 17 to 18 million years ago, says palaeo-anthropologist Dr. Martin Pickford of the Geological Survey of Namibia.

The most extraordinary find so far is fossil eggshells that are much bigger and almost twice as thick as modern ostrich eggshells and have a different surface pore pattern. "The micro and macrostructure of these eggs has not previously been described and no bird exists today with such peculiar pore complexes," says Pickford.

He has worked together with Yannique Dauphin of the Insti-

tute of Palaeontology in Paris, and their conclusion is that the eggs represent a hitherto unknown genus and species of bird. It has been named *Diamantornis wardi* — Ward's diamond bird, in honour of the diamond-rich discovery site north-east of Oranjemund and geologist John Ward who found numerous fossil eggshell fragments.

The largest of the eggshells has a volume of 1.8 litres, compared to a modern ostrich egg which is on average 1.2 litres. The shell is between 2.8 and 2.9 mm thick compared to an average thickness of ostrich eggs of 1.8 mm.

Other fossils found include mammalian remains, and traces of plants and animals.

Dinosaur droppings fetch over £3000

DINOSAUR DROPPINGS and eggs yesterday fetched monster prices at auction.

Some 23 stegosaurus pellets, which have crystallised into agate over the eons, were sold to an anonymous telephone bidder for £3300—more than 10 times their estimate.

A clutch of 10 dinosaur eggs, laid up to 100 million years ago and fossilised in their nest—the largest group ever to come on the market—made £50,600, top price in Bonhams' sale of fossils and tribal art.

Dinomania proved a lucrative money spinner for the London auctioneers, whose largest room was full to

overflowing for the sale.

Kevin Conru, head of tribal art, said the sale had gone "brilliantly," making a total £164,174—more than three times the estimate.

He said the success of Spielberg's dinosaur blockbuster Jurassic Park had helped publicise the sale and boosted interest in the cheaper items.

The clutch of 10 eggs, five to seven inches across and thought to have been laid by a maiasaur, and a nest of five, which made £13,750, were both bought by an anonymous American. A collection of 33 pieces of amber with prehistoric insects trapped inside made £5280.



The clutch of 10 dinosaur e

Sunday Times 16.1.94

'Missing link' joy over furry whale

By ROGER HIGHFIELD
London

A FURRY whale that walked the Earth some 50-million years ago has been discovered by scientists, providing a missing link in the fossil record that reveals how mammals made the transition from land to the oceans.

Dr Hans Thewissen, of Northeastern Ohio University's College of Medicine, working with colleagues in Washington and Islamabad, reports the most promising precursor of modern cetaceans so far discovered in Friday's issue of the journal Science.

The skeleton of the fish-eating creature had limbs and feet, and was found in

Pakistan preserved in sediment that has been dated as 50-million years old by Dr Thewissen, working with Dr Taseer Hussain and Mr Mohammed Arif.

Dr Thewissen said the creature would have measured up to 4m long and looked a little like a sea lion.

"This is a furry critter, probably," he added. "It is hard to imagine an animal that spent part of its time on land that would not have hair."

The whale probably swam by undulating its spine, say the authors, forcing its feet up and down in a similar fashion to a modern otter when it swims quickly. — *The Telegraph, London*

EP HERALD 16.2.94

Rare skeleton of dinosaur on sale

Herald Correspondent

LONDON — The skeleton of a flying reptile, a pterodactyl, so beautifully preserved that every bone in its body is still visible after 100 million years, will be the star attraction at a London auction in April.

The flying reptile, which resembles a giant bat, lived in Germany during the Jurassic and Cretaceous periods (215 million to 65 million years ago) and is being sold by a German collector. It is expected to sell for about £30,000.

The pterodactyl, measuring 38cm by 30cm, is one of many rare lots at the sale.

Several lots for the auction have been offered by US collector Dr Lonnie Paulus with other items coming from the collection of the late Arthur Luckett, senior scientific officer at the Natural History Museum in London.

Also featured in the auction is an example of the largest egg ever laid by a flightless great elephant bird (aepyornis) which grew to about three metres and became extinct in Madagascar 38 million years ago. Measuring more than 24cm long, it is big enough to house seven ostrich eggs.

The rare skeleton of an Austrian cave bear (ursus spelaeus) which became extinct 15,000 years ago is expected to fetch up to £15,000.

Massive dinosaur skeleton found on Isle of Wight

LONDON — The first, almost complete skeleton of what may have been the most savage dinosaur who ever lived, has been found on the Isle of Wight.

"He was considerably larger than the velociraptors who were so frightening in the film, *Jurassic Park*," said Mr Steve Hutt, curator of the Museum of Isle of Wight Geology, who found the remains of the creature.

The huge carnivorous animal, stood about 6 metres at the shoulder, compared with the maximum of 4.5 metres for velociraptor. He was also considerably older, having lived some 120 million years ago compared with their age of approximately 90 million years.

Small numbers of bones of the giant predator have been found several times before, but not enough for palaeontologists to know enough about it to classify it. But the Isle of Wight find will almost certainly lead to the animal being named.

The exact location is being kept secret to prevent tourists from tramping over the site.

"This animal had horrific teeth like steak knives, about 10cm long

and extremely sharp."

And he had another weapon in the form of bacteria from rotting meat in his mouth. This meant that if he bit another animal and it escaped, it was liable to die quickly of poison.

"We aren't sure yet whether he hunted in packs like the velociraptors. But this seems highly probable because of some massed footprints of the same animal found in Utah which had been trailing a herd of plant-eating brontosaurs."

Mr Hutt said he and his colleagues had found between 60 and 70 per cent of the animals bones in one place. This compared with small bone collections of the same creature which had been discovered elsewhere in finds going back to the 19th century. "The Isle of Wight is probably the best place in Europe to find remains of dinosaurs and other pre-historic creatures because of its sharply eroding coastlines which continually reveal long-buried skeletons."

"But carnivorous dinosaurs are especially rare because, like all carnivores, they are fewer in number than their prey."

©The Telegraph pic London



eggs which went for £50,600.

Storm as amateur finds rare dinosaur remains

London — An amateur fossil hunter who unearthed the bones of one of the world's rarest dinosaurs is at the centre of a dispute about the future of the skeleton.

Lin Spearpoint found the remains of the 115 million-year-old *Polacanthus* on the Isle of Wight after only recently becoming interested in fossils.

The discovery — regarded as one of the most important of its kind — could be worth up to \$40 000 (£210 000) for its finder. But some British experts believe the skeleton would be better off in the hands of the professionals.

Spearpoint found the bones in a landslip near her home in Brighthelm.

She said "I just stumbled across them."

Fossil expert Martin Simpson, who helped complete the excavation, said: "This will rewrite the dinosaur books." — Star Bureau.

News from Wits BPI - Marion Bamford

All staff and students are continuing with their teaching and research commitments and planning to attend the PSSA Conference in September.

Chris Gow has several papers in various stages at present, two dealing with the primitive Permian anapsid reptiles; one with a Permian therapsid, and one with a Late Triassic crocodile. Chris' PhD student **Lars Juul**, from Denmark, has had a lengthy review of archosaur phylogeny accepted for our journal *Palaeontologia africana*.

Ann Cadman is in between projects and has been working for the IEC which she says has been very interesting, busy and sometimes frustrating. The pollen is calling to her again! **Grigor Aitken** has upgraded to a PhD but now part-time because he is gainfully employed in the Wits Science Faculty Office. **Sue de Villiers** has also upgraded to a PhD but is waiting for more pollen samples from the West Coast. At the end of June Sue, Ann, Bruce and Marion will be attending a mini symposium where Sue and Marion will present an overview of their West Coast palynology and wood research respectively, and do some field work.

David Dilkes has had his post doc extended by 6 months so he will be able to attend the PSSA conference in Grahamstown. His work on the re-description of the South African rhynchosaur *Howesia* and *Mesosuchus* and phylogenetic analysis of Rhynchosauria and other Late Permian and Late Triassic diapsid reptiles is progressing well. The phylogenetic study is now complete and shows some intriguing results. Rhynchosauria is a monophyletic taxon, as others have argued, with *Mesosuchus* and *Howesia* as basal taxa. However, many of the patterns of relationships of other diapsids proposed previously are not supported. Extensions of temporal ranges of taxa, based upon the phylogeny, predicts a radiation of diapsids in the Late Permian which contradicts an apparent radiation of the majority of these groups in the Triassic. David is also starting a project on a juvenile rhynchosaur from the *Lystrosaurus* Assemblage Zone that could be one of the oldest known reptilian embryos. A paper on the ontogeny and biology of the nasal chamber in trematopid amphibians from the Early Permian of Texas completed during his graduate studies at the University of Toronto has recently appeared in *Palaeontology*.

David has just been offered a postdoctoral position at McGill University in Montreal to work with Dr Robert Carroll on a phylogenetic study of the origin of modern amphibians. He expects to be able to take up this position upon completion of his South African postdoctoral work in October 1994.

John Hancox and **Richard Lewis** have just returned from a trip to John's field sites near Sterkstroom and Aliwal North. This happened to coincide with the arrival of the first serious cold front..... they didn't have anything complimentary to say about camping at -14° C! In spite of this they managed to do all the field work planned.

Heidi Fourie has begun the onerous task of writing up her PhD. She has finished looking at the scylacosaurid from the SAM "Butch", has fully prepared an *Ictidosuchops*, is dissecting the girdle and limbs of *Varanus niloticus* in order to compare muscle attachments with the latter, and is describing a baurid.

Elizabeth Latimer has started an MSc on fossil amphibians from the Permian (Beaufort Group) and Triassic (*Lystrosaurus* Zone). There are two genera *Rhinesuchus* and *Uranocentrodon* of the family Rhinesuchidae and they need to be properly described and their classification reconsidered.

Marion Bamford has an ever increasing collection of fossil wood from all over southern Africa. The latest arrivals are from Zimbabwe and Mozambique. A large collection from Mozambique was stolen or rather the vehicle carrying it was! The geologist who collected the wood, Mike de Wit, parked the vehicle right outside his hotel, opposite the police station, in Maputo, overnight. He also paid the hotel security guard to watch the vehicle. Something woke Mike up in the early hours of the morning and he looked out of his seventh storey window to see his vehicle being driven away. By the time he had dashed down the seven flights of stairs (the lifts were broken) the vehicle and wood (and other equipment) were nowhere to be seen! The hotel security guard was sleeping off his indulgence from the night before and the police station was completely empty. Fortunately there were some pieces of wood in the other vehicle which had left the day before, so Marion will be able to identify those remaining pieces.

This is a note of warning from the BPL.

Last year we had a sales rep from Zeiss come and look at our microscope because the camera was faulty. This Fred Snyman said Zeiss would be very expensive and slow but he knew someone who was quick, efficient and cheap! This someone happened to be his son Adrian, and he came and "fixed" our microscope. To cut a long story short Zeiss had to really fix our microscope for some R12 000, instead of an original repair that would have cost \pm R1 000 ... so beware of unofficial microscope repairmen! Needless to say Fred Snyman is no longer employed by Zeiss.

Marion Bamford

oOo



"Go for the bronze, baby!"

News from Roger Smith - South African Museum, Cape Town.

UCT/SAM Summer School

Last Christmas was spent preparing notes and lectures for a week-long summer school course entitled "From the fossil record: Cameos of the ancient Karoo". This culminated in a day trip around the Peninsula looking at the roadside geology which proved very popular with the public and has already been run twice since then.

Jurassic prizewinners' trip to Clocolan

In March the winners of the SAM/Cape Times-sponsored Jurassic Park Competition were treated to an all expenses paid, once-in-a-lifetime four-day trip to Clocolan. Mr and Mrs West of Kenilworth were more than a little apprehensive after being told that they had won a return flight to Bloemfontein (courtesy of SAA) and even more uneasy about camping in a deserted farmhouse in the heart of 'volkstaat' territory. Their fears were compounded during a two-hour night drive through Boputhatswana which, unbeknown to us, was in the process of ousting its leader, followed by a short stretch of off-roading before arriving at their rustic rondavel complete with scorpion for room service. The morning sun brought them a breathtaking vista of eastern Free State grasslands with broad open valleys and golden sandstone-capped koppies. Towering thunderheads passed over every so often with spectacular lightning and marble-sized hailstones. Unfortunately, a hole in the water supply tank meant that although water was running around the house, we had only boiled reservoir water and cans of amber liquid to drink. We camped on a farm called Maquatling, the site of several legendary Zulu battles, reminders of which are still to be found in the form of flattened bullets and uniform buttons. Our guests spent each day on the red shale slopes looking for dinosaur fossils. It didn't take them long to get hooked on the thrill of the hunt. Annelise and I began excavating the back end of a *Massospondylus* skeleton which turned out to be a three-day affair and gave the West's a taste of the effort needed to get these critters out of the rock. Memorable moments include wake-up dips in the reservoir, the thickest tastiest potjiekos ever, clouting my forefinger with a geological pick, the Maluti mountains, avian mite bites and Mr West's observation that sitting in the bottom of an erosion donga excavating a 200 million year old *Euskelosaurus* femur 'is a very different kind of experience!'

Fossil oases in the Namib

For some years Prof Tom Mason and I have been studying modern arid zone river deposits in Namibia to aid interpretations of sedimentary successions in the upper Karoo of Southern Africa. Continuing with this project we recently spent 10 days at the Desert Environment Research Unit at Gobabeb in Namibia. In the central Namib region of Namibia, along the Kuiseb River, there are several fossil lake deposits which were discovered by Dr Henno Martin whilst in exile during World War II. Dr Martin is a geologist and author of the well known book, "The Sheltering Desert". The fossil lake deposits are cemented with carbonate so that they now stand proud of the present deflation surface as isolated, saucer-shaped koppies some 100-300m in diameter. Detailed planimetric mapping was aided by Tom's GPS satellite positioning system and aerial photographs. Observations of the lithology, sedimentary structures, plant and animal fossils and trace fossils were documented on two of the fossil pans i.e. Khommabes and Zebra Pan. Interesting algal mounds, microbial- encrusted reedbeds, several footprints and two types of termite colonies were found as well as some bovid bones. Preliminary interpretation of the sediments and fossils indicate that these lakes were replenished by flash-floods and possibly represent the end-point pans of ephemeral palaeo-rivers.

Gillian King returned to England in April, we wish her success with job hunting and hope all goes well. I have taken over as Head of Earth Sciences Division in the Museum which means extra admin but hopefully not enough to interrupt research. Papers in preparation include; "juvenile aggregation of *Youngina*" with Sue Evans (Univ. London); "changing fluvial environments across P-Tr boundary in the main Karoo Basin" and "reworked alluvial paleosols due to base-level fluctuations in the Elliot", with James Kitching. In August I will attend the IAS International Sedimentology Conference in Recife, Brazil, spend a few days looking at a really big river system and be back in time for the Grahamstown meeting. Funds for a research trip to the Sakamena Group in southwestern Madagascar have finally materialised, thanks to an award from FRD, so this will happen early next year.

Roger Smith

oOo

OBITUARY - Bernard Harry (Barney) Newman: 1927 - 1994

One of the real characters of the local palaeontological scene, Barney Newman - artist, technician, preparator, anatomist, raconteur, folk singer and bon vivant - died in Port Elizabeth after a short illness on 7 February 1994.



Barney and Maggie Newman in 1983, putting the finishing touches to Barney's reconstruction of *Massospondylus* (photo courtesy of the Library, Port Elizabeth Museum).

Barney was a Londoner - born in St Mary's - and he bore many of the hall-marks of that breed: stocky and cocky, possessed of razor-sharp wit, a peppery temper, a disdain for authority, and a taste for rambunctious living. From the tattoos on his arms and the gruff Cockney accent, one could easily mistake him for a dock-worker or coster-monger - cloth cap jammed on thinning pate and lunch-tin clamped under one arm; but his goatee beard hinted at his other side - in some ways perhaps a rather unexpected side, but the one from which the greater part of his working career derived: Barney was an artist. And he had the temperament to go with it. Anyone foolish enough to get on the wrong side of the Newman temper was never left in any doubt about who was who and what was what. He was a devastatingly straight talker, and to those who were his bosses down the years it must have seemed that one of his great pleasures in life was to clash with them. Although he clashed often, it was always soon over, and his "clashes" invariably retained their respect for him. He was the sort of colourful character for whom allowances are readily made because his many other qualities mitigated his short fuse.

Barney had a passion for exploration, he loved reading, painting and modelling - many of them interests that he shared with his wife Maggie and their children. On his last trip overseas late in 1993 one of the chores he set himself was to find model kits for three historical steam locomotives which he wanted to build; before he died he had completed two of them, to his great pride and satisfaction. He was involved in writing virtually up to the day of his death, and one of the last pieces he wrote was an account of his reconstruction of the Cretaceous sauropod *Algoasaurus* which now stands almost completed in the Port Elizabeth Museum. I hope to present a version of this work at the forthcoming PSSA Conference in September.

What a crying shame it is that the book of personal anecdotes and reminiscences which he so often threatened to write never materialised before his death. He was a great raconteur and story-teller, but the stories have all gone with him, and we are much the poorer for that.

I knew of Barney long before I met him in person. While I was a young and very green zoologist working at the Queen Victoria Museum in Harare, Zimbabwe, I read his paper on the stance and gait of *Tyrannosaurus*. Barney's deep insight into the way animals really work allowed him to break through the received wisdom

of the day, and he boldly and accurately depicted *Tyrannosaurus* as a rather lumbering, clumsy animal with a horizontal backbone, instead of the romantic image of an upright, rearing, rapacious killer which the reconstruction in the American Museum in New York had cultivated in the minds of most people. Barney's view, based on careful analysis of the joint surfaces and muscle scars on the bones of the great beast, has won the day and any who saw the blockbuster movie, Jurassic Park, basically saw Barney's ideas on *Tyrannosaurus* translated into believable flesh by Steven Spielberg.

For most of his career Barney worked for the Natural History Museum in London, mostly in the Department of Fossil Reptiles, where he was the colleague and friend of some of the best known names in dinosaur palaeontology. He admits that when he started there, he didn't know a dinosaur from a hole in the ground. By the time he left the museum to go to Africa 21 years later, he was an established researcher and restorer of fossil reptiles, especially of dinosaurs and plesiosaurs. He worked on a wide variety of other extinct creatures from the Jurassic and Cretaceous beds of Britain, as well as on collections from other parts of the world. He told me that in his early years in the department of the BM, when he was given the job of sorting through a neglected and shambolic specimen store, he had the dubious distinction of throwing out a specimen of *Brachiosaurus*! The specimen had been so poorly collected, and so badly handled down the years since it was found in East Africa just after the First World War, that the bones had crumbled to an absolutely useless fine powder. The plaster jackets in which the bones had been wrapped in the field looked like bizarre giant egg-timers, with the precious silt steadily trickling out to oblivion. He said that judging from the number of plaster-jacketed parcels, quite a large part of the original skeleton had been collected, but not one bit of it was worth keeping. So, with typical Newman courage and determination, he threw it out!

When he left the BM in 1970 to come to Africa, Barney remained in museums. Initially he went to Nigeria, as head of the Rotimi Museum of Natural History at the University of Ife. His wife Maggie recalls how, in spite of the punishing heat of the tropics, Barney would suddenly bundle her and the two children, aged six months and six years respectively, into the Land-Rover and dash off into the bush to explore the country, with drying nappies flapping from the windows - much to the astonishment of locals and ex-pats alike; the ex-pat Americans, on the other hand, never stirred from their air-conditioned lounges and iced double Martinis

unless they absolutely had to. Barney the Adventurer always wanted to know what was over the next horizon, or around the next bend in the road.

When his contract in Nigeria ended, Barney moved to what was then Rhodesia, just a few years before I emigrated to South Africa. Although he and I corresponded a few times in Rhodesia, we never met. I was in Salisbury (Harare), and he and Maggie were in Victoria Falls, where he was variously a taxidermist, tourist officer, and even a character actor in an adventure movie, "Safari Express", shot at the Falls and starring Ursula Andress. Maggie told me of one scene in the film which involved Barney and Miss Andress, and why on earth Barney himself never boasted about it, I simply can't imagine. It appears that during the scene the character played by Barney orders the shapely Miss Andress to undress. As Maggie tells it, Barney must be one of very few men on this planet who not only ordered Ursula Andress to undress, but got paid for it to boot!

Shortly before the Newmans themselves headed south, Barney had a job for a while in Bulawayo which he must have considered right up his street - Brewer's Assistant in the Municipal Breweries in Bulawayo! His first job on coming to South Africa was as a member of the Display team at the Port Elizabeth Museum, together with Maggie, and the last major job he did here in South Africa was also for the PE Museum. This was our life-size reconstruction of *Algoasaurus*. This will surely remain Barney's monument in the minds of many of us.

His love of nature, and his keen eye for the way animals live and move, allowed him to visualise in detail how a reconstruction of an extinct animal should look. The products of this aspect of his work adorn several major museums, both in this country and in Britain. Barney himself was not satisfied with some details of his reconstruction of Port Elizabeth's *Algoasaurus*, which he had to leave before it was quite finished on going overseas last year. He went unhappy with it, and he returned ill. He was agitating to get back to it to finish it off as soon as he could shake off his current inconvenient illness. But that was not to be, and now it will fall to someone else to finish it off. This will not be easy; no-one steps easily into his shoes. I am glad to know that in our own museum we have so many reminders of his talent and skill, and so many things by which we can remember him. For the past twenty three years, Barney and Maggie, his wife, have constituted a formidable artistic team. The two of them have left an indelible mark wherever they have been, particularly in museums, and most especially in

the museum in Port Elizabeth. Knowing Barney as we all did, much credit must go to Maggie for the calm, rock-solid, stabilising influence which she had down the years over the often stormy Barney. He has much to thank her for in their years of married life together.

One of the last big adventures of Barney's life was his return visit to the land of his birth in the middle of 1993. This re-kindled his love for Britain, and especially for Scotland, and he was talking more and more about going back for good. He had some misgivings about where things were headed in South Africa, and he spent a lot of time in latter months wondering what to do in the best interests of his family - especially of Lexie, their youngest daughter, and his special fossil-collecting field-assistant. He talked quite a lot of an exciting prospect in Scotland, where he would have a chance of building more life-size reconstructions of dinosaurs for a new major theme-park, and I think he had almost made the decision that was where he wanted to go. It was while he was in Britain, and while undergoing minor surgery for a quite unrelated complaint, that his doctors discovered the totally unexpected signs of the cancer that snuffed out his life. For him, and for those closest to him, it was perhaps a blessing that it was over so quickly. Barney was too active and impatient a person to have coped easily with a slow and lingering decline. Typical of the man, within a few days of being discharged following that hernia op, Barney set off on a twenty-mile hike through the British country-side, and in spite of the artificial knee-joint which he had as a consequence of the arthritis that had hit him in latter years, Barney lost no opportunity to go mountain-climbing while he was in Britain. He was nothing if not indomitable.

Those of us who were his friends will remember him with great affection. We will miss him as an utterly unforgettable, highly entertaining friend. Our thoughts go out to Maggie, Fiona, Bjorn and Lexie.

Perhaps, if there is some cosmic eternity into which we slip after we're gone, Barney's out there at this moment in some great and timeless landscape of earlier geological times, checking for himself to see if he really was right about the way *Tyrannosaurus* stood and walked and ran. If so, I hope he'll find a way to let me know, and perhaps while he's there he'll go and check on *Syntarsus* for me. Go well, Old Friend.

Mike Raath

oOo

Fossil Philately - Billy de Klerk

For those members that are interested in collecting stamps with a Dinosaur theme the article "A return to Dinosaurs" in Stamp Magazine (Oct 1993, p.112 -117) is an absolute must! This article written by Andrew C. Scott reviews the more than 200 new stamps, featuring dinosaurs, that have appeared since November 1991.

Listed below are some recent stamp issues with a fossil theme that have appeared over the past six months. The list is by no means complete.

BARBADOS - I'm not sure of the date of issue but they produced five 90c stamps depicting extinct marine reptiles like ichthyosaurs, turtles, pleisiosaurs and a mosasaur.

DOMINICA - 1992. Dinosaur Heads.

10c - Camptosaurus	15c - Edmontosaurus	25c - Corythosaurus
60c - Stegosaurus	\$1 - Torosaurus	\$3 - Euoplocephalus
\$4 - Tyrannosaurus	\$5 - Parasaurolophus	
\$6 - Torosaurus (miniature sheet)	\$6 - Corythosaurus (miniature sheet)	

ANTIGUA - April 6, 1992. Dinosaurs of the Jurassic Period.

10c - Pteranodon	15c - Brachiosaurus	30c - Tyrannosaurus rex
50c - Parasaurolophus	\$1 - Demonychus	\$2 - Triceratops
\$4 - Protoceratops (hatching eg)		\$5 - Stegosaurus
\$6 - Allosaurus (miniature sheet)	\$6 - Apatosaurus (miniature sheet)	

The above issue was overprinted with BARBUDA MAIL (in black) on 8 Dec. 1992

GHANA - June 1, 1992. Prehistoric Creatures.

Iguanodon - 20c	Anchisaurus - 50c	Heterodontosaurus - 60c
Anatosaurus - 100c	Elaphosaurus - 200c	Coelphysis - 500c
Rhamphorhynchus - 600c		
Coelphysis - 1500c (miniature sheet)	Elaphosaurus - 1500c (miniature sheet)	

SIERRA LEONE - June 8, 1992. Prehistoric Creatures (all 50Le denomination).

Rhamphorhynchus	Pteranodon	Dimorphodon
Pterodactyl	Archaeopteryx	Iguanodon
Hypsilophodon	Nothosaurus	Brachiosaurus
Kentrosaurus	Pleisiosaurus	Trachofons
Hesperornis	Henodus	Steneosaurus
Stenopterygius	Eurhinosaurus	Placodus
Mosasaurus	Mixosaurus	
Hesperornis (miniature sheet)		

GAMBIA - Sept. 21, 1992. Dinosaurs, first series.

Dryosaurus - 20b	Saurolophus - 25b
Cetiosaurus - D1.25	Camptosaurus - D1.50
Spinosaurus - D3.00	Ornithomimus - D5.00
Kentrosaurus - D10	Schlemochus - D12
Allosaurus - D25 (miniature sheet)	Ornithosuchus - D25 (miniature sheet)

Picture p.105

TONGA - May 3, 1993. The evolution of the planet Earth. Definitives.

- 13s - Formation of gemstones: section through active volcano, and rough gemstones
- 45s - Early marine life-forms, and stylised geological section, with fault.
- 60s - Dinosaurs and cycads, with geological section illustrating deposition of remains.
- 80s - Two different dinosaurs, and similar section.

MADAM & EVE

By S Francis, H Dugmore & Rico



CONFERENCE

* 8th PSSA Conference

Albany Museum & Rhodes University, Grahamstown - 5 - 9 September 1994

Contact: Dr Billy de Klerk, Albany Museum, Somerset Street,
Grahamstown, 6140, Tel. (0461) 22312 Fax 22398.
email: amwd@hippo.ru.ac.za

■ International Conference on the Value and Valuation of Natural Science Collections

Manchester University, UK

19 - 21 April 1995

The aim of this conference is to promote discussion of the value to society of natural science collections and the way in which these social and scientific values may also be expressed in financial terms. The subject is timely because curators are now being asked to put commercial and insurance valuations on museum collections for audit purposes. It is also becoming increasingly important to be able to justify the use of resources to maintain and curate natural science material. The international line-up of speakers will be drawn from government agencies, users of collections, museums, insurers, dealers and auction houses. The conference will be of interest to curators, directors and trustees of museums, government and local authority agencies and auditors.

The conference is being organized by the Biology Curators' Group, the Geological Curators' Group and the Manchester Museum. The aims of the conference are supported by the Museums and Galleries Commission, The Linnean Society of London and the UK Federation for Natural Sciences Collections Research.

Potential speakers and delegates should respond to:

The Valuation Conference Secretariat, Manchester Museum, University of Manchester, Oxford Road, Manchester M13 9PL, UK.

First time lucky for fossil digger

By ROBERT BEDLOW
London

A WOMAN who has been collecting fossils for less than a year has unearthed the bones of one of the world's rarest dinosaurs, said to have lived 115 million years ago on the Isle of Wight.

Mrs Lin Spearpoint dug up what is believed to be the most complete skeleton of *polacanthus* ever discovered, and valued at up to £225,000, at Brighstone, a well-known site rich in fossils.

Only two partial skeletons of the armour-plated herbivore have been found — in 1867 and 1979 — and both are in the British Museum.

Earlier this year, Mrs Spearpoint, 38, started to dig at Brighstone, close to where she lives, and found several bones.

She showed them to Mr Martin Simpson, 45, a respected amateur fossil hunter from Whitwell who, realising they were of major importance, immediately set in motion a full-scale excavation.

The 3.6m by 1.5m skeleton is being restored and when ready will go on display.

play at Mr Simpson's museum.

"This will help re-write the dinosaur books, as all the previous restorations of this animal were based on incomplete material," he said.

Mrs Spearpoint said the *polacanthus* was her first dinosaur find.

"I stumbled across the bones. I did not know what they were, but as soon as they had been identified there was tremendous interest from the experts."

Her husband, Richard, 45, who receives a disability pension, said: "We are not well-off and as much as I would like to see the skeleton stay on the island, we would be silly in our position not to listen to offers."

"I have been told there are already two in the pipeline."

Mr Barry Field, Conservative Party MP for the island and a member of the Commons environment select committee, said: "These things are immensely valuable. People do not realise they can be worth thousands of pounds." — *The Telegraph, London*

Jurassic 'gasp' theory aired

LONDON — The conclusion seems inescapable. Dinosaurs did not meet a fiery end when an asteroid hit the Earth; they ran out of breath, rather painfully. The size of the average dinosaur's nostril — similar to that of a horse — plus the discovery of prehistoric air bubbles trapped in amber are cited by American palaeontologists in support of this breath-taking theory.

Oxygen levels in the trapped air were measured, apparently indicating that over two million years the oxygen dropped from a dinosaur-sustaining 35 per cent to 28 per cent at the end of the Cretaceous period, which was when the creatures had become virtually extinct.

With their relatively small nostrils and no diaphragm to push the air in and out of the lungs, the giant reptiles simply ran out of puff and gasped their last, researchers say. A separate study of an asteroid crater in Iowa lends weight to the dismissal of the death crash theory. The asteroid struck the Earth 16m years too early.

— *The Telegraph, Pte, London*

Reminder: Deadline for contributions for the next issue of PAL News is
25 November 1994