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PAL NEWS NUUS

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Front cover: Robert Broom as he is to be seen in the book *Life Etched in stone* (see article on pg.8).

FROM THE EDITOR

Greetings Everyone

Happy new millennium and new year to everyone, I hope the new era brings happiness and fulfilment to everyone, and an increased awareness of fossils and their rich contribution to our earthly heritage! Indications from public response to recent popular educational palaeontogical programmes, shows that in general fossils hold a great fascination for people. So good luck to PSSA members in particular concerning their discovery of new and exciting fossils which will excite the people of the world. Of course here close to the southern tip of Africa the incredible Permo-Triassic Beaufort Group and amazing Plio-Pleistocene fossil deposits, continue to yield rich new finds, not to mention the Cape Supergroup with the variety of new fossil fishes which it has yielded over the last few years.

Thanks to the contributors of this issue, in particular see the notice for the upcoming PSSA conference.

All the best and take care
Patrick

ROY DAN-FREDERICK OOSTHUIZEN

It is indeed a great pity, that Roy Oosthuizen did not live to receive his copy of Colin MaCrae's book to see some of his beloved fossils illustrated for all the world to admire. Sadly, Oom Roy passed away after a short illness late last year. All of us who had the pleasure of knowing him and have enjoyed his and tant' Lucy's hospitality at Zwartskraal while either just admiring his magnificent fossil collection, or working on some of his rare finds, will miss him in may ways. We extend our heartfelt sympathies to tant' Lucy and family in their bereavement.

To refer to Roy as an amateur collector would be a severe understatement. Many of us with personal experience were struck by his amazing energy, both mentally and physically in building up a magnificent collection of fossils, ranging from Pre-Cambrian Ediacaran faunas to Holocene molluscs; but especially his superb collection of Bokkeveld faunas. Most of all, however, Roy was known for his perspicacious and tenacious pursuit of knowledge and his keen and enquiring mind. He would often refer to himself as just being a simple farmer, but once he got started on fossils (and many other topics), it soon become clear that here was no amateur, but a self taught palaeontologist whose knowledge of fossils surpassed that of many so-called professionals.

According to Lucy, Roy's passion for fossils started as the result of a slight domestic disagreement. She ran into the veld behind the homestead of Zwartskraal to cool off, and while doing so, noticed some shells in the rocks where Roy and his friends had spent their time as children playing games. When she eventually returned home, and told Roy of this, he at first would not believe her. However, once he saw these bivalves, his life-long passion for fossils was kindled, and he never looked back. After he had given up full-time farming in 1974, he could spend all his time looking for fossils and this was the start of his

magnificent collection, which was eventually turned into a private museum at Zwartskraal. Roy was lucky in being around at the time when the Gamka Poort dam was being built, and this formed the core of the best collection of Bokkeveld fossils in the country. Roy was an extremely meticulous collector; he collected everything he could lay his hand on, and kept a careful record of where each specimen had been found. All these data were recorded on a card file and each specimen was clearly numbered.

Initially, Roy worked in total isolation, and apart from the occasional visit from local residents who wanted to see the skull of a prehistoric inhabitant of the area who had his head bashed in, he received little scientific encouragement. However, his talents and collection soon came to the attention of people like Johann Loock and Burger Oelofsen, who not only encouraged him, but supplied him with literature and other assistance. To be in the field with Roy was a pleasure, but also taxing. According to Burger Oelofsen, Roy would spend all hours of daylight looking for fossils. Then, when it became too dark to see, he would start asking questions and discussing all kinds of geological and palaeontological topics. Eventually, Burger said, he would throw in the towel pleading fatigue to try to get some sleep. Undaunted, Roy would continue reading his latest gifts of reprints and photocopied far into the early hours of the morning.

Somehow the South African Museum got to know of Roy and his fossils, and with the help of the then director, Dr T.H. Barry, was made an associate research fellow of the museum in 1980. The museum arranged for a permit for the National Monuments Council and provided Roy with

a monthly petrol allowance to partly cover his travel expenses. An agreement was also drawn up according to which his collection would become the property of the museum after his death. This is more or less the time when I got to know Roy, and come to realize how fiercely possessive has was of this collection, and how scientifically isolated he felt at Zwartskraal. Apart from a few (*Eodicynodon*) specimens which were prepared at the Museum and described by Dr Barry, Roy would virtually never allow any of his fossils to leave his museum. If you wanted to study his material, you had to go to Zwartskraal. This led to a steady stream of local and overseas palaeontologists visiting Zwartskraal and enjoying the warm hospitality of Roy and Lucy. The visitor's book, which each visitor had to sign religiously, no matter how short or long the visit, or whether they had been there before, bears testimony to the world-wide reputation which his collection had acquired. I remember accompanying Burger Oelofsen with a visiting Argentinian geologist who wanted to study some of the Karoo bivalves. We arrived at Prins Albert round about lunch time, and, not wanting to impose on Lucy, agreed to have a pub lunch at the hotel. We had hardly sat down for a beer when the barman asked if we were Oelofsen and Klinger; there was a telephone call. It was Roy, asking when we were coming - lunch (and the fossils) were waiting for us. To this day, I still do not know how Roy had known where we were at that time, but it did show how eagerly he anticipated visitors to his museum.

Roy discovered, or was instrumental, in finding many unique fossils in the Prins Albert District. Apart from the bivalves mentioned above, these include early *Eodicynodon*, archaeocyathids from Antarctica in glacial erratics, the first and only known eurypterid from the Karoo, and numerous new taxa from the Bokkeveld. As a result of his meticulous collecting, Roy was able to publish the first accurate account of the geographic and stratigraphic distribution of the fauna of the Bokkeveld Group (Oosthuizen, 1984).

Sadly, the time has now arrived for the R.D.F. Oosthuizen collection to be transferred to the South African Museum. I sincerely hope, that, with

our amalgamation into the new Southern flagship Museum, we can prepare a display of some of the magnificent Bokkeveld fossils as a small tribute to the man who collected them with a passion unsurpassed by many professional palaeontologists.

From all of us, Roy, we miss you and we thank you for everything you meant for palaeontology in South Africa.

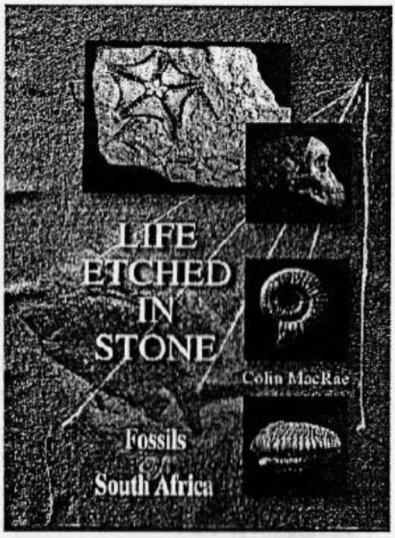
Herbie Klinger

PSSA 2000 CONFERENCE DATES

The date for the PSSA conference in the year 2000 has been finalised. It will be held at the **Transvaal Museum** between **4-8 September**. This week has been selected because it suits many people, including those who are based at Universities.

There will be a special theme, "Who's Who in the Plio Pleistocene", dealing with taxonomy, phylogeny and hominid origins. Short papers in summary form, with illustrations (including phylogenies) can be sent to Francis Thackeray, Department of Palaeontology, Transvaal Museum (NFI), P.O. Box 413, Pretoria 0001, preferably before August 1, 2000.

NEW RELEASE - LIFE ETCHED IN STONE



After many years of eager anticipation, *Life Etched in Stone*, Colin MacRae's book on South African palaeontology, was finally released in October last year. When you page through the book you are taken aback at the magnitude of the task undertaken by the author. In this publication Colin successfully attempted to cover every aspect of palaeontology in South Africa. It kicks off with one of the most complete reviews of the history of South African palaeontology (starting with the discovery of the first South African fossil in 1779) and the people who played a part in the science. This is followed by chapters on different fossils-types, ways of fossilization, classification and the uses of fossils.

The bulk of this volume consists of a comprehensive account on prehistoric life in South Africa, starting with the fossils of unicellular life-forms found at Baberton and ending with the origin of man and the rich South African hominid fossil record. In the intervening pages every conceivable palaeontological subject is discussed and it is only once you read through this book that you can truly appreciate the rich palaeontological record of South Africa. The text throughout is written in an easy-to-read style, but with enough valuable information to appeal to the amateur enthusiast and professional earth-scientist alike. It is elucidated by more than 350 excellent photographs, maps and illustrations. A book like this has been long overdue and is a must-have

for all palaeontologists (and all scientific libraries) in South Africa. It can be purchased at any of the established bookshops or directly from *The Mineral Corporation* (tel: 011 - 463 4867). Also visit their website at www.fossil.co.za.

Johann Neveling

NEWS FROM:
BILLY DE KLERK, ALBANY MUSEUM, GRAHAMSTOWN

On the departmental front I've gone through a major renovation in the Museums collection storage area and have in the process built up a decent preparation laboratory with three workstations. Storage capacity has also been greatly enhanced due to a generous donation of three lovely "visual storage" wall units from the Geology Dept. at Rhodes University. These units have banks of no less than 32 draws topped by glass display cases.

KAROO WORK: My mapping of the "Sante Sana" dicynodont track way (east of Graaff-Reinet) is now completed and I'm currently trying to prepare contour maps of 12 individual well preserved prints (any suggestions?). To protect the palaeosurface and tracks from weathering too quickly, a thin layer of latex rubber has been applied onto the surface to act as a preservation and binding medium. In addition a thatch (reed) roof cover has been built over the trackway and three rain-water deflection walls have been bulldozed up-slope from the surface - these protective measures seem to be working well so far.

In July I received a report of a possible fossil in the Tsolo district of the former Transkei, north of Umtata. This report turned out to be a magnificent large skull of a rhinesuchid amphibian (70cm long x 50cm wide at the back of the skull). Excavating this skull proved to be difficult as it was located 20cm under water in a fast flowing river that the local folk said had NEVER dried up! The challenge of extracting the skull therefore, became that much more difficult. To complicate matters, my planned work schedule was such that it would be about four months be-

Big dogs having fun with helium

fore I could return to deflect the water flow away from the fossil and then let it dry out before being excavated in a plaster jacket. In addition the flow of the river, with its sediment load, was actively eroding the softish matrix and fossil as we were looking on. I decided to try and remove the skull in sections there and then! Working with a heavy hammer and chisel in water 10 cm deep for a day and a half was no picnic! To cut a long story short, I was able to extract the skull in sections - each in many smaller fragments. I've had my two volunteer preparators working on the reassembly and preparation of the skull which will eventually be a nice research and display specimen. With the assistance of Elizabeth Latimer and Ross Damiani at the BPI, I've found myself on a steep amphibian learning curve.

CRETACEOUS WORK: Earlier in the year I was fortunate to be awarded a research grant from the "Jurassic Foundation" and Dr Callum Ross, from the State Univ. of New York at Stony Brook, and I, were then

able to continue our excavation and exploration efforts on the lower Cretaceous vertebrate fossils (mainly dinosaurs) in the Kirkwood district of the Algoa Basin. We were also able to extend our exploration to the Oudtshoorn Basin as well - all of this field work was done during July.

We spent a week in the Kirkwood Cliffs excavating a bone bed which had in the past couple of years yielded numerous small bones of at least nine baby individuals of an as yet undescribed ornithopod dinosaur. I employed seven students and we carefully moved about six tons of overburden off the top of the "bone bed" and then started with slow methodical excavation. Apart from finding numerous individual ornithopod bones, we also removed five plaster jacketed blocks. It became apparent that the bonanza of fossils that we exposed in 1997 had dropped off considerably as bone was generally less abundant. We did however find some gems - a single large toe bone and a large centrum from a larger ornithopod; a single stegosaur tooth (the first from this site).

Exploration of the Oudtshoorn Basin was focussed on ANY available outcrop! - mainly in the Calitzdorp, Oudtshoorn and De Rust areas before being rained out. There is quite a lot of outcrop in the basin but on closer inspection it is mostly high energy sediments - grits, conglomerates and minor coarse sands; much more than in the Algoa Basin. What little fine sand and mudstones we did find had a distinctly different look about it when compared to sediments in the Algoa Basin. It appears as if there are very few palaeosol horizons and apart from one small locality we found NO FOSSIL WOOD in the Basin!

Callum and I spent two days in the Calitzdorp area (good port wine country!!) as it was from this area that "Gigantic Plesiosaur" bones were found and reported by Dr Hoffman of the National Museum in Bloemfontein in 1966. These fossils had been reported as missing from their collection. We didn't find a thing in this area but while in the field I did phone Bruce Rubidge at the BPI and he reported that Johann Welman (in Bloemfontein) had found the original fossil "vertebrae" in his collection. At the end of the field season I phoned Johann and he reported

that he thought that they were not vertebrae at all but rather some other part of a very large theropod dinosaur! Johann and I will be following up on this in the near future!!!

A sauropod tooth that Robert Broom found in 1927 (described by Von Heune in 1932) was said to have come from the Oudtshoorn grey-green sandstone. After some detective work we found the general locality where Broom had discovered the sauropod tooth on the northern outskirts of Oudtshoorn. It was from this locality that sandstone blocks were quarried for building purposes at the turn of the century till the 1930's. Many of the lovely old "Ostrich Palaces" and civic buildings in Oudtshoorn were built with this Kirkwood grey-green sandstone. It was from these small quarries that we found numerous white bone fragments (one being part of a pelvis), two pearly white theropod teeth and one small locality with fragments of extremely well preserved fossil wood - the only wood we were able to find.

In all this was a very successful field season and I've started with the enormous amount of preparation that now needs to be done. In conclusion - our paper describing the new theropod dinosaur "Kirky" from the Kirkwood Formation, is *in press* with the *Journal of Vertebrate Paleontology*.

Cheers, Billy de Klerk

BPI NEWS FROM MARION BAMFORD

The BPI continues to thrive and even expand. Although **Chris Gow** has now retired and moved down to Knysna, **Alain Renaut** has been appointed in his position and will continue to lecture to the geology and zoology students. We will miss Chris but wish him and Tinx an active and enjoyable life fishing, birdwatching, game-viewing, reading and relaxing!

James and **Betty Kitching** have come back to Johannesburg and settled

Games you can play with your cat

in Greenside. By all accounts they are much happier here and we hope to see more of them.

Our Collections Manager, **Mike Raath,** continues to sort and add the catalogued specimens to the computer database. **Darlington Munyikwa** has registered to do an MSc part-time. We occasionally hear from **Ann Cadman**, who after a disastrous voyage to Madagascar where their yacht was destroyed, is now touring through Europe and possibly heading for Turkey and Morocco. **Sue de Villiers** works out of UCT and SAM and produces reports on pollens and spores from the west coast and inland Cretaceous-Tertiary sites. She keeps us up to date with the happenings in Cape Town. **Sherine Isaacs,** our secretary, has moved to Civil Engineering and we wish her success there. **Melanie Smith** is helping out in the interim. **Marion Bamford** continues with lecturing and fossil wood and macro-plant research. She presented a paper on the Sterkfontein woods at the INQUA conference in Durban at the beginning of August last year, and a paper on Cretaceous woods of southern Africa

How poodles first came to North America

"Don't eat the flippers, Zeke,
or they'll know we're tourists."

at the 6th Mesozoic Terrestrial Ecosystems conference in Buenos Aires. Marion has established a research collaboration with French palaeobotanists in Lyon and will be visiting them again later this year. Her students, **Rosie Adendorff** and **Ray Richter**, are still tackling the problems of Permian palaeobotany and taxonomy and finding some interesting results. Ray has taken over from Ann in monitoring the airspora and you can see the results of her efforts every Monday night on the 8pm News (SABC 3) and pollen counts. **Andrea Sandersen,** supervised by Sue and Marion, made good progress working through the palynology of two off-shore boreholes. **Romala Govender** successfully completed her Honours last year and is now registered to do an MSc.

Sean Modesto attended the SVP meeting in Denver last year and gave a paper on new anomodonts from the Karoo Basin. Another post doc, **Ross Damiani,** (student of Anne Warren) has settled into his research on the temnospondyls and is also working with John Hancox and Johann Neveling on new amphibian material from the Triassic and the palaeoecology of some "flat frogs" from the *Cynognathus* Zone.

There was a strong South African contingent at the 7th Mesozoic Terrestrial Ecosystems conference in Buenos Aires, Argentina, in September-October 1999. **Alain Renaut** (who presented a paper on the jaw mechanisms of *Kannemeyeria*), **Marion Bamford, John Hancox, Johan Welman, Heidi Anderson, Roger Smith** and **Anusuya Chinsamy-Turan** all presented papers and participated in the field excursions in a most fascinating country - both palaeontologically and culturally. On the spur of the moment we decided to put in a bid to host the next Mesozoic Terrestrial Ecosystems conference in Cape Town so Roger borrowed slides from all of us, tantalised the delegates with Cape scenery and descriptions of wines, and won an overwhelming vote in our favour. So in 3-4 years time we will all meet in Cape Town.

The expansion at BPI has taken the form of **Lee Berger's** new unit, Palaeoanthropological Unit for Research and Exploration, joining the BPI. The new unit has been given the building next to BPI which will soon be

renovated to accommodate Lee, a dozen or so students, labs and fossil collections. Several joint projects are already underway.

It was with great sadness that we heard of the untimely death of **Rob Fox** in January. He was a geology student from Wits who came to the BPI to do Honours in 1988. Since then he has worked as an exploration geologist for De Beers in Botswana and Angola but had always maintained close ties with the BPI. He leaves his wife Celia and four young children, in Johannesburg, and to them we extend our heartfelt sympathy.

JOHN HANCOX, WITS GEOLOGY

In the past few months, life has been quite hectic on the palaeontological front. In September 99, I was one of some seven South Africans who made the pilgrimage to Buenos Aires for the Seventh International Symposium on Mesozoic Terrestrial Ecosystems. Five of us also attended the pre-conference trip to the Triassic basins of Ischigualasto and Talampaya (San Juan and La Rioja Provinces). Alain Renaut and I were also pleasantly surprised to learn that the type of *Dinodontosaurus* had returned home, currently being housed in the newly built museum at La Rioja. Thanks to Andrea Arcucci for organising early morning access.

The conference itself was quite quiet, however the SA contingent gave a good account of themselves. Good enough to earn us the "right" to host the next conference in Cape Town.

Following the conference Alain Renaut and I travelled to Tucuman to study their collection of dicynodont material. This proved to be more than we expected including a mounted skeleton of *Ischigualastia*, the type of *"Kannemeyeria" argentinesis* and specimens of *Viceria* and *Dinodontosaurus*.

Apart from dicynodonts, amphibians are also the focus of studies at

"You're up, Red."

present with quite a lot of new material awaiting description. Ross Damiani, Bruce Rubidge and I have combined to produce a short note describing *Paracyclotosaurus* from the uppermost *Cynognathus* Assemblage Zone. This is the first documented occurrence of the genus outside of Australia and India.

Work is still underway on the Triassic section of the Karoo, and a very successful field-trip was undertaken in early February to sites in the northwestern Free State around the town of Senekal. These localities are of particular interest as they contain both the Permo-Triassic and Triassic-Jurassic boundaries. The farm Driefontein (*Cynognathus* Assemblage Zone, subzone A) in particular has become the focus of our work as it preserves a really amazing record of life in an Early Triassic lake. To date some 10 genera have been identified, with the fauna dominated by amphibians (capitosaurids and brachyopids) and archosaurs. The site is also proving to allow brief glimpses of a rare and previoulsy unknown

small reptilian fauna including the first rhynchosaurs of known provenance. Two new fish fossils and a number of lungfish toothplates complete the haul.

A bit of fossilicking in the Elliot Formation in the same area brought to light two productive bone horizons, the lower of which supplied a large (possibly Chigutasaurid) tabular. The Elliot seems to hold a lot of promise for future work and the discovery of new forms (we await with baited breath the first aetosaur).

Remember, palaeontologists need sedimentologists more than a fish needs a bicycle.

Regards, John

NORTON HILLER, CANTERBURY MUSEUM, CHRISTCHURCH

It is some time since I communicated via *PalNews*. If I remember correctly the last time I did, I was busily involved in a project installing a new history gallery. Mercifully that job was successfully completed and I have been able to turn my attention to more earthy things. Brachiopods have continued to occupy a great deal of my thought processes and I am pleased to report that a paper on the Stethothyridinae, a subfamily of Tertiary terebratellids from Australia and New Zealand, has been finished and accepted for publication. This was a project I started when I first visited New Zealand in 1990 on a spell of sabbatical leave. It seemed to evolve at the same speed as the brachiopods!

Ever the one for new challenges, I have just submitted a manuscript on a rare Late Cretaceous isopod. Coming to terms with all the technical jargon attached to arthropods is as bad as doing the same with vertebrates.

On the subject of vertebrates, earlier this year we were pleased to host a visit from Mike Caldwell and Rob Holmes (Canadian Museum of Nature,

Ottawa) and Gorden Bell (South Dakota School of Mines). They were in New Zealand to see our mosasaur remains as part of a study they are doing on mosasaurs from all over the world. As a reminder of their visit they left two large blocks of calcareous siltstone containing mosasaur bones for us to prepare. One finally yielded three caudal vertebrae but the other contained disarticulated skull elements and is proving to be most interesting. More jargon to learn! Currently, I am compiling a list of New Zealand's fossil marine reptile taxa as part of a Species 2000 initiative. I had not realised we had so much.

Good luck to all my pals in South Africa - have a nice millennium.
Norton Hiller

THE KAROO PALAEO LAB: SA MUSEUM

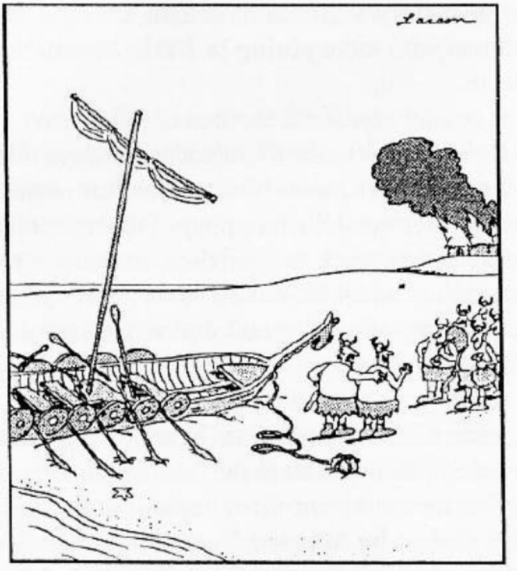
A brief review of our activities over the past very busy year during which the Karoo Palaeo team spent 88 days in the field doing research and educational type activities. The main reason for so much fieldwork was the unexpected success of 2 funding proposals, one on the Permo-Triassic boundary in the Karoo basin with Prof Peter Ward from Washington State (NSF) and the other with Dr Callum Ross from Stony Brook on Cretaceous crater lake deposits in Bushmanland (National Geographic Society).

The year kicked off with a 2 week trip to Bethulie to excavate a large articulated skeleton that we found in November last year. I thought it was a large gorgonopsian based on the extremely long snout with prominent canines and it was only when it was partly prepared that we discovered that it is in fact a *Lystrosaurus (cf mcCaigi)* skeleton. Annelise is currently cleaning this monster- measuring 2.5 m from snout to tail weighing around 1.5 tonnes. We are indebted to Dr Peter Morkel for allowing the staff of the National Parks Board Game Capture Unit to travel from Kimberley to the site to lift the plastered fossil onto a lorry and transport it to Cape Town free of charge! A film crew from Canada

subsidised the cost of the excavation and despite the misidentification they were well pleased with the footage which will be eventually be part of a film about mass extinctions.

In April we were excavating again, this time at Langebaanweg in the new West Coast Fossil Park. We have uncovered about 15 square metres of a 5 million year old channel-lag bonebed that Dr Brett Hendey originally pitted back in the 70's. It is intended that at least 150 square metres of this bonebed be uncovered for public viewing in a purpose built site museum. Under the guidance of Dave Halkett from UCT Archaeology, myself and research assistants, Georgina Skinner and Hedi Stummer along with the Park Manager - Pippa Haarhoff, spent 2 weeks down on our hands and knees scraping and picking the sandy matrix off the many beautifully phosphatised *Sivathere* bones. We were helped out for a week by 3 Honours Palaeobiology students from UCT. The dig is temporarily covered by a horticultural tunnel with a specially constructed scaffold walkway for safe public access. For more information and some images visit the WCFP website at www.museums.org.za and look under the SAMuseum's special projects.

June was spent in a deserted farmhouse near Marydale in the Northern Cape with a real assortment of palaeopeople from all over the world. They had come together to help me dig a pit into a 70 million year old crater lake to see what fossils could be found. Palaeomammalogist Callum Ross and his student Rob Asher flew in from Stony Brook, palaeobotanists Marion Bamford, her student Rosie Ardendorf and aussie Keith Holmes drove down from Wits, preparators Georgina and Hedi came with me from Cape Town and photographer Claudio Vasqualez joined us from UCT. The aim was to sink a shaft into the fossiliferous lake sediments that were originally discovered in a De Beers diamond exploration drill core back in 1983. I subsequently described the core and its fossils in 1986. The core yielded several well-preserved fishes (recently described by Eric Anderson as a new galaxiid, *Stompooria rogersmithi*), a frog or two and an interesting femur possibly from a theropod dinosaur or early bird. Using these tantalising samples of this



"Everyone can just put down their loot and plunder, and Sven here—yes, old Sven, who was in charge of reading the tide chart—has something to say to us all."

potentially diverse Cretaceous terrestrial fauna, Callum and I persuaded National Geographic Society to fund the sinking of a shaft to recover more fossils. We hired a team of local prospectors who were equipped with a compressor, rock hammer and scotch crane to do the heavy work. In 10 days they dug us a 4x5metre pit down to12.5 metres. Once on the surface all the laminated mudrock slabs were dried for a day or so then carefully parted to reveal the bedding planes. After 10 days splitting, coating and packing we had ourselves at least 250 fully articulated frog skeletons (cf *Eoxenopoides*) in various growth stages, a few seeds and twigs and a single string of 5 caudal vertebrae which appears to be from an ornithopod dinosaur (R. Molnaar, *pers. comm.*). The frogs will provide a fantastic study collection for the anuran taxonomists and they also show an interesting range of taphonomic styles that indicate a

subaqueous burial history with "kill" events. Funds permitting, the project will continue with more pitting in 2001. Meanwhile we have to find more sponsors.

In July we took Belinda Day to the therapsid track ways near Fraserburg for her to collect data for her palaeobiology honours project. She spent 4 days doing detailed topographic mapping of the most clearly defined, supposedly dinocephalian, track way on the Gansfontein palaeosurface. Her honours dissertation which reconstructs the foot mechanics and step cycle of dinocephalians using skeletal and ichnological data, is well worth publishing.

In August we were off to Namibia to check the preparation of the *Erythrosuchus* skeleton that we left in the Geological Survey a couple of years ago. This fine specimen with two heads is completely uncovered and is now being studied by Marriett Kotze for her masters. She will continue preparing one of the skulls. We took Marriett to the *Erythrosuchus* locality on Etjo mountain for 4 days to check on some geological details to finalise a paper on palaeoenvironments of the Omingonde Formation. On the last afternoon we took the opportunity of visiting a nearby dinosaur track way site on the farm Otjihaenemaperero. Some of the deeper impressions into Etjo sandstone clearly show a lot of foot movement in their morphology so on the spur of the moment we made a plaster cast of a left/right footprint pair. They appear to be three-toed prints of a medium-sized bipedal dinosaur, possibly a Jurassic theropod, of which we have found no body fossil as yet.

In September I joined another 6 South Africans on a field excursion to western Argentina to look at rocks and fossils in the rift bound Triassic strata of Ischigulastia and Talampaya basins. Lots of badland exposures with enough cynodonts, dicynodonts and plant fossils to keep this band of Karoo palaeontologists happy. This was followed by a sleepless week in downtown Buenos Aries sharing a noisy hotel room with messrs Hancox and Renaut. The talks at the 7th International Conference on Mesozoic Terrestrial Ecosystems were of sufficiently high quality to keep

us awake through the afternoon siesta, and the traffic did likewise all through the night.

With barely two weeks to recover the Karoo Palaeo team was off again to finish off fieldwork on the Permo-Triassic boundary sequence at Lootsberg Pass, north of Graaff Reinet. Peter Ward joined us (Hedi, Georgina, Paul October and me) for 14 days' fossil collecting along 3 sections through the boundary at Lootsberg, Old Lootsberg and Wapadsberg passes. At each locality, detailed stratigraphic and sedimentological logs were drawn and used to plot the fossil occurrences. A total of 115 *in situ* fossils have been taphonomically described and positioned with GPS. Most have been collected for further preparation/identification. These include 2 fascinating small "sinuous" skeletons, a tiny diapsid skull and partial skeleton, some unusual flanged caniniform processes and two carnivores from the *Dicynodon/Lystrosaurus* overlap zone.

The following week was spent in the Karoo National Park playing guide to 45 Friends of the SAMuseum on their annual Karoo fossil hunt. Notable finds during this week were a fine small gorgonopsian from the Leeukloof study section and a large pristerognathid skull from La-De-Da (both by members of the Karoo team). To round off the trip we spent the last 3 days excavating a beautiful scattered skeleton of a large dicynodont (cf *Palanomodon*) from Walplaas near Aberdeen. The farmer, Willie Pienaar alerted us to this fossil which was found by a hunter earlier in the year. We could only bring back the front half of "Oompies" (named after Johannes the farm labourer who helped us) this time - the back end will have to wait till March next year.

Next year we have made plans to follow the P-Tr boundary into the Natal Midlands, spend 2 months excavating at the West Coast Fossil Park and a 10 day trip to Southern Lesotho to do some detailed ichnological work on the Elliot and Clarens track way surfaces with Claudia Marsicano (Argentina). Preparation of the *Lystrosaurus* bonebed from Bethulie nears completion and will feature in a paper on "Drought-stricken

"Here, Fifi! C'mon! ... Faster, Fifi!"

therapsids in the Early Triassic". The *Pareiasaurus* skeleton from Murraysburg preserved with all its dermal ossification intact is emerging slowly and will be a really attractive display specimen. Annie has been preparing the smaller stuff, a perfect "galaesaurid" which has already featured in a couple of articles - including the BBC's *Walking with Dinosaurs* book, and an interesting slab of several tiny amphibians with *Owenetta* skulls in between.

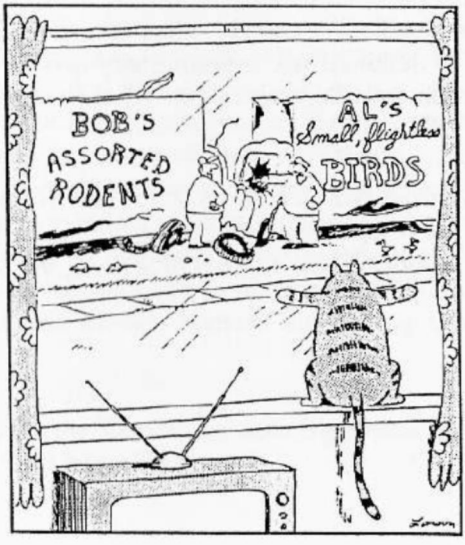
Roger Smith

THE COUNCIL FOR GEOSCIENCE, PRETORIA.

Patrick Bender has submitted the big project documenting a number of new Late Permian actinopterygian Lower Beaufort Group species, in which ideas concerning the phylogenetic, biostratigraphic and biogeographic potential of these new taxa are introduced. A short report

on the correlative potential of lungfish in the Upper Beaufort Group, together with John Hancox, is to be submitted to the Council before the end of the financial year. This is being used to initiate a project with John, documenting and analysing the fishes of the Upper Beaufort Group; at this stage there appear to be lots of lungfish, and some other strange and fishy creatures lurking in the collections waiting and hoping to be identified!

After many red-eye hours spent in front of the computer, **Hymne Laubscher** and **Magdel Gricius** finally finished the gargantuan task of sorting out our electronic database. It is now much more streamlined and easy to work with. Magdel, ably supported by Lucas Lemotlo, a UCT student, is also currently busy whipping the fossil store into shape to keep up with developments in the database department. Anyone requiring specimen (and casting) info can contact Magdel (tel: 012 - 841 1382). Meanwhile Hymne kept up the tempo, working on her masters thesis which constitute a very detailed account of Pleistocene life in the dunes of Basaansklip on the West Coast.



Johann Neveling spent most of his time during the second half of 1999 cloistered in his office, with only two short field trips to keep him sane. The first was at the end of September when he accompanied Uwe Reimold, Dion Brandt and Matt Kitching (all from Wits Geology) on a short three-day trip to the Karoo to look for any evidence of meteorite impact at the Permo-Triassic boundary. This was followed by a two week trip to Senekal and Harrismith in November, where he continued with the investigation on the *Lystrosaurus-Cynognathus* Zone contact in the northern part of the basin. The intervening moments were not idly spent though, and the fruits of his labours will hopefully soon see the light of day in the form of two biostratigraphic papers. Johann also got involved in some collaborative work with Ross Damiani, whose arrival at the BPI seemingly declared the hunting season on all amphibians officially open. We'll keep you informed as to what will happen next.

Recent Publications.

Bender, P.A. 1999. First documentation of similar Late Permian actinopterygian fish from Australia and South Africa. *Records of the Western Australian Museum. Suppl.* **57**: 183-189.

Evans, F.J, and Bender, P.A. 1999. The Permian Whitehill Formation (Ecca Group) of South Africa: a preliminary review of palaeoniscoid fishes and taphonomy. *Records of the Western Australian Museum. Suppl.***57**: 175-181.

Neveling, J., Rubidge, B.S. & Hancox, P.J. 1999. A lower *Cynognathus* Assemblage Zone fossil from the Katberg Formation (Beaufort group, South Africa). *South African Journal of Science,* **95**, 555-556.

DISEASES LAUD KANSAS DECISION

Billy de Klerk came across the following, snippet on the Internet.....

"The Ebola Virus, speaking from its headquarters somewhere in Africa, today thanked the Kansas Board of Education for its recent decision to remove evolution from the state's science curriculum. The virus pointed out that the resulting eventual loss of evolutionary biologists would make life easier for it and many other emerging diseases, as health workers would not be able to distinguish lethal and nonlethal strains that had evolved from one other. In its two recent visits to the U.S., the Ebola strains involved were those that had evolved from the deadly human strains into strains that kill monkeys, not people. "If they hadn't known, we could really have inspired hysteria," commented Ebola. "More fun next time."

"Meanwhile, Hanta Virus, Cholera, AIDS, and Influenza announced that they had no intention of stopping their own evolution and looked forward to even more successful world tours in the future. Although none of them expressed much interest in visiting Kansas, they denied they had plans to boycott the state. Finally, stock futures for a variety of "old-fashioned" diseases (such as diphtheria and streptococcus), malaria, and tuberculosis went up, as it appears that humans now are increasingly prepared to ignore the evolution of antibiotic resistance for diseases that have long been held in check by modern medicines. Diphtheria, speaking from its exile in poorer parts of the former U.S.S.R., commented, "The lack of new antibiotics seems to reflect a human arrogance that assumes we can't evolve and come back." It pointed out that malaria and TB had already evolved forms that were immune to all known antibiotics. "Without understanding how we evolve, humans are turning themselves into fodder."

Asked to comment on the Kansas decision, Diphtheria smiled and said, "Thanks, Kansas, we'll be seeing you...."

NEWSFLASH FROM IAN McLACHLAN !!

Hi everyone
In line with the Government White paper on Energy, Soekor's Petroleum Licensing Unit will be separating from Soekor with effect from 1st November 1999.

The new agency, an independent subsidiary of CEF, "The South African Agency for the Promotion of Petroleum Exploration and Exploitation (Pty) Ltd " will be known as "Petroleum Agency SA"

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Kind Regards
Ian McLachlan

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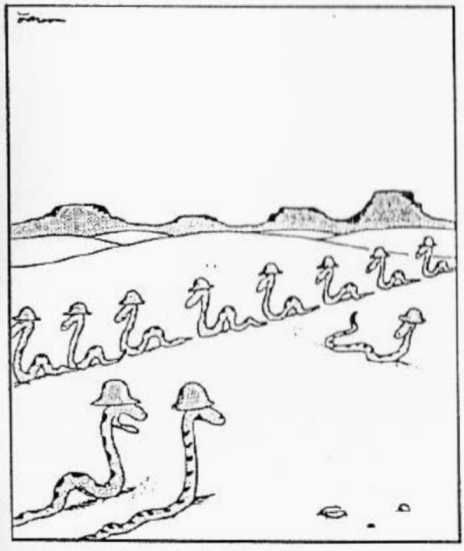
Dr Johann Welman:	kvertpal@nasmus.co.za

"The first thing I'm gonna do is wipe that smile off your face!"



"*Johnson! Back in formation!* ... Dang. I hate sidewinders."

Reminder:

Deadline for contributions for the next issue of ***PAL NEWS***

is **30 June**