

ISSN 0379 - 9336

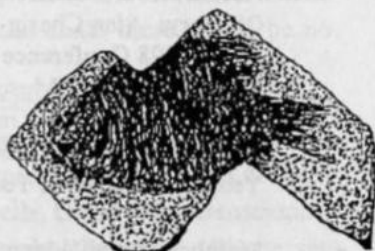


PAL NEWS NUUS

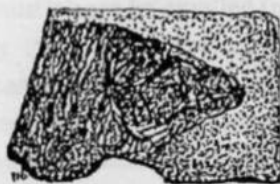
Biannual newsletter of the Palaeontological Society of Southern Africa
Halfjaarlikse Nuusbrief van die Paleontologiese Vereniging van Suider Afrika
Vol/Band 11(3) Dec. 1997



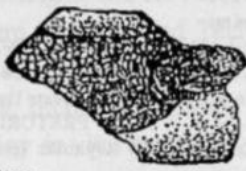
Atherstonia scutata



1cm



3 new taxa



INTERESTING SOUTHERN AFRICAN FOSSILS:

Upper Permian actinopterygian fish specimens from Wilgerbosch,
New Bethesda district

CONTENTS

♦ From the Editor	pg 3
♦ News from:	
Eric Anderson, J.L.B Smith Institute	pg 5
Patrick Bender - Geoscience Museum, Pretoria	pg 6
BPI-Palaeontology - Wits University, Johannesburg	pg 7
James Brink - National Museum, Bloemfontein	pg 12
Marvin Carstens - BPI, Wits University	pg 13
Billy de Klerk, Albany Museum, Grahamstown	pg 13
Heidi Fourie - Transvaal Museum, Pretoria	pg 15
Norton Hillier - Canterbury Museum, New Zealand	pg 15
Obituary: Alan Charig	pg 16
PSSA 1998 Conference	pg 19
Roger Smith - SA Museum, Cape Town	pg 23
Francis Thackeray - Transvaal Museum, Pretoria	pg 24
Anne Warren - La Trobe University, Australia	pg 26
Year of Science and Technology	pg 27
♦ Members e-mail addresses	pg 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.

Editorial team:

Editor: Patrick Bender (Tel: 012 322-7122 / Fax: 012 322-7939)

Museum of the Council for Geoscience (email - bender@tm.up.ac.za)

Postal address: Private Bag X112
PRETORIA, 0001

Assistant Editor: Sally Reynolds (e-mail: reynolds@tm.co.za).

Front Cover: Wilgerbosch, *Dicynodon Assemblage Zone*, Lower Beaufort Group, is well known for its abundance of fossil fish specimens. James Kitching collected most of the specimens prior to the 2nd Gondwana Symposium in 1970.

FROM THE EDITOR

Greetings all

Thanks to all the contributors, it seems to be quite a bumper issue including a couple of articles from overseas, clearly the PSSA is alive and well. In this issue we include an obituary to Alan Charig, on behalf of all PSSA members I would like to extend condolences to his children, family and friends. Its a sad and unfortunate reality that newsletters have from time to time to include obituaries- but all life is fragile, vulnerable and finite and so we have to encompass death (just think, without death there would be no fossils and no palaeontologists).

The Government, supported by the Parliamentary Portfolio Committee on Arts, Culture, Science and Technology, has declared 1998 as the Year of Science and Technology. Palaeontology is represented under one of the 8 themes allocated to the National Science Councils, Council for Geoscience, are the coordinators (contacts: myself and Danie Barnardo). Please see under its own separate heading in this issue. We have to start moving with scripting and production early in the new year so any thematic and research input must please be emailed (preferably) or otherwise fax etc before the 15 January 1998. The Department of Arts, Culture, Science and Technology was mandated to implement the programme, and I must say that the response from the Dept has been very positive, there really seems to be a will and awareness that Science and Technology is vital to South Africa's future.

The PSSA biannual conference is coming up next year. Please begin to consider nominees for the various committee postions, so that all nominations can be considered at the AGM (See the First Circular notices regarding PSSA 98 in this issue). Enclosed find the first announcement and

invitation to the Dual Congress: IV International Congress of the International Association for the Study of Human Palaeontology, jointly with an association meeting of the International Association of Human Biologists. The Gondwana Symposium takes place in Cape Town in June 1998, please find a notice from John Almond in this issue. Also on next year is Geocongress (8-10 July 1998 in Pretoria), enquiries should be directed to: The Secretary, Geocongress '98, P.O.Box 798, Silverton, 0127, South Africa, email: eaucamp@geoscience.org.za, tel: 012 841 1167.

Changes to the PSSA's home page address: <http://www.ru.ac.za/pssa/>

Best wishes for the new year, may your 1998 be a fruitful one.

Take care

Patrick



*The
Far Side*

When the dust had settled, a lone figure was revealed standing on the small knoll. Yes, he, too, was a herd animal—but he was *through* runnin'.

NEWS FROM:

ERIC ANDERSON, J.L.B. SMITH INSTITUTE OF ICHTHYOLOGY

Since my last communication, the most important palaeo-event for me has been attending the Conference on Australasian Vertebrate Evolution, Palaeontology and Systematics in Perth, Australia during June-July, organized by John Long and company at the Western Australian Museum. Also attending were Bruce Rubidge, Fiona Evans and Patrick Bender, so SA was well represented. Fiona and I joined a pre-meeting field trip to the world-famous Gogo fish sites (Late Devonian) for two days of sheer delight for me. At a place called Lloyd's Hill on the second day I found a complete head and trunk shield of an arthrodire placoderm in a limestone nodule, then a lungfish scale patch, then a mass of bone and plates that needed cleaning before one could identify it, so it was three fish for me in about two hours. Heaven! It was also good seeing Norton Hiller again on this trip, and he found a nearly complete and rare paleoniscoid fish called Moythomasia. The paper I presented at the conference in Perth summarized our SA Devonian fish finds, emphasizing biogeography. It will be published by the WA Museum as a supplement to their Records and will be co-authored by the gang of six, those who participated in the Great Devonian Fish Hunt of 1996 (Anderson, Long, Almond, Evans, Theron and Bender). A very pleasant and new (for me) exploration of caves and wineries after the conference highlighted the trip, and, yes it's true, they really do make a better Chardonnay than we do, don't they Bruce?

PATRICK BENDER, GEOSCIENCE MUSEUM, PRETORIA

As editor asking for contributions from everyone else, you should probably come up with your own scientific contribution every issue, thus once again you all have the pleasure/displeasure of keeping up to date with my PALNEWSSES.

Since the PALNEWS June 1997 Issue, I attended the Conference on Australasian Vertebrate Evolution Palaeontology and Systematics, and Extinction Symposium in early July, presenting a paper on "The Upper Permian fish from the South African Karoo basin.", and co-presented a paper with Fiona Evans (who delivered the paper) on "Whitchill Formation (Ecca Group) palaeoniscoids from the Permian of South Africa." There was quite a group from the S.A. there-Bruce Rubidge being the only 'non-fish' researcher! It was an excellent conference, thanks to John Long, Alex Baynes and the rest of the organisers. I then went across to the Queensland Museum in Brisbane and the Australian Museum in Sydney where I had the pleasure of looking for comparisons between the Upper Permian palaeoichnofaunas of the Bowen and Karoo basins. Interestingly, I came across a little deep-bodied actinopterygian form, in the AM, collected by Michael Leu, that appears pretty similar to a form from the Lower Beaufort Group. This indicates links between the two sedimentary basins, and/or a taxon with a very wide distribution, this should add to the systematic understanding of the deep-bodied actinopterygian forms. Mike Leu will hopefully be describing the Bowen Basin ichnofauna more fully, but I will be submitting a short article documenting the similarities between the forms, to the Records of the Western Australian Museum, as part of the CAVEPS proceedings.

My research on the Lower Beaufort Group actinops seems to be gaining

some momentum, I recently submitted a research letter to the S.A. Journal of Science documenting the diverse actinop fossil site at Wilgerbosch, New Bethesda district, a second research letter is in preparation on another abundant Lower Beaufort fish site near Victoria West, further down the pipeline are papers with Russian palaeoichthyologist Eugenia Sytchevskaya.....

NEWS FROM THE BPI

The past half-year has seen members of the BPI very busy with projects aimed at providing exposure for the fossils of both the Institute and the country, and highlighting research conducted in the department. On Sunday 31 August we kicked off with our very own open day, termed "Fossil Fun Day" providing several activities: all staff members, strengthened also by the presence of Judy Maguire and John Hancox, presented lectures on their fields of interest and research, tours were conducted through the museum, herbarium, fossil store and preparation areas, where our preparators showed off their patience and skill in winning new fossils from the rocks. Needless to say our own pet fossil robo-reptiles, the "Fred-and-Fang-duo", did their fair share to attract interest, Fred T-shirts were on sale, as were Dino-dogs and Jungle-juice (don't ask!). Marion Duncan and Joseph Fink of Josemar were heavily involved in arranging and running this day, as were various spouses and miscellaneous family members.

In September staff were once again involved in bringing palaeontology to the masses when we gave a series of lectures at the Karos Indaba Hotel to highlight Heritage Week culminating in Heritage Day on the 24th. Marion Duncan, Joseph Fink, Richard Lewis and Marvin Carstens set up and manned a wonderful display of fossils, casts and posters in a marquee in the hotel grounds, and the academic staff of the BPI presented lectures

on a wide variety of palaeontological topics. Unfortunately, the hotel's planning for the event was not up to scratch, so it wasn't as successful as it might have been.

Chris Gow has just returned (v-e-r-y reluctantly!) from a most productive sabbatical, and has completed three papers on the parareptiles *Eunotosaurus* and *Milleretta* and the early crocodile *Protosuchus*.

Bruce Rubidge, apart from his annual excursions to the Beaufort-Ecca contact, has also been involved with field work in Namibia together with Dr Ian Stanistreet and geologists from the University of Würzburg who have for some years been conducting research on rocks of Permian-Jurassic age in Namibia. Recently Bruce has returned from an excursion to Zimbabwe where he has been doing fieldwork on Upper Permian rocks from the Hwange area together with Dr Jochen Lepper from Germany. The earliest fluvially deposited rocks of the Beaufort Group along the Ecca-Beaufort contact continue to deliver exciting fossils and recently some new anomodonts have been discovered.

We were pleased to welcome several visitors to the Institute recently. Among them were Denise Sigogneau-Russell and her husband Don Russell, both from the National Museum of Natural History in Paris. Denise, who is well known for her research on primitive theriodont therapsids and Mesozoic mammals, has recently retired, but because of her expertise on gorgonopsian mammal-like reptiles she was invited out to South Africa by the BPI on an exchange programme funded by the French Embassy in South Africa to stimulate research on this exciting group of carnivorous therapsids. She gave talks and demonstrations at the South African Museum in Cape Town, Stellenbosch University, National Museum in Bloemfontein and also at the Bernard Price Institute. Staff and students at the Institute benefitted greatly from discussions with Denise. She also found time to work on research projects on the Biarmosuchia, the

most primitive therapsids, with Bruce Rubidge and MSc student Carol Aston.

Archana Tripathi and Neerja Jha, two Indian palynologists from the Birbal Sahni Institute of Palaeobotany in Lucknow spent time at the BPI studying Permian palynomorphs in the Institute's collection.

Further on the palaeo-plant side of things, PhD student Sue de Villiers received two pieces of good news: she was awarded the Cranwell Smith Award by the American Association of Stratigraphic Palynologists for her work on the Tertiary pollen of Namaqualand. This is a cash award with which she plans to buy several totally fascinating pollen tomes. Shortly after, Sue was informed that her PhD thesis had been favourably received by the examiners – she will graduate in the forthcoming ceremonies. At the end of July Sue's husband was transferred to Cape Town, which means that poor, unfortunate Sue is now pining away in the Mother City, and longing for the smog, grime and crime of Joeys. She is not lost to the BPI, though, because she will continue to analyse palynological samples that are prepared in our labs up here, on a contractual basis for De Beers Marine.

Ann Cadman and Marion Bamford have been kept extremely busy organising and running the Third Symposium on African Palynology (see below). Although this has dominated their lives and sapped their energies for the past several months, it is not all they have been involved in: Marion continues her research on fossil wood and has just returned from a month's exchange programme, funded by a scholarship from the French Embassy in South Africa, looking at fossil woods in France. She spent two weeks in Paris studying North African fossil woods with Dr Jean-Claude Koeniguer of the Université Pierre et Marie Curie, followed by two weeks in Lyon studying Jurassic woods from France with Dr Marc Philippe and Prof. Georges Barale of the Université Claude Bernard

Lyon 1. It was a case of "To the woods! To the woods!" in a new and original sense! She has no sooner collected her breath than she is preparing for yet another trip overseas, this time to Oz. Ann had no sooner recovered her breath after the Palynology Conference than she has jetted off to South America with a brief stopover in London.

Mike Raath continues to wrestle with collections and their documentation, and with recalcitrant computer equipment. A major project to re-organise and extend the specimen storage facilities in the main fossil storerooms is currently underway.

We are very sorry to report that our colleague, mentor and friend, Prof. James Kitching, spent most of the month of October flat on his back in hospital in Joburg, but we are happy to say that he and Betty are now back home in Graaff-Reinet, where James is steadily on the mend.

Third Symposium of African Palynology:

The BPI recently hosted the Third Symposium of African Palynology, under the auspices of the International Association of African Palynology/Association Internationale de Palynologie Africaine (IAAP/AIPA). The Symposium was held in the conference venue at the WITS Club on West Campus, where Dave Brown and his staff catered admirably to the needs of delegates. From 14 to 19 September there was the constant excited buzz of palynologists, somewhat akin to bees, and all after the same target – pollen. Total registration for the Symposium was 75, of whom only about a dozen were South Africans. The remainder were from 25 countries, mostly African (Francophone as well as Anglophone) and European.

After an informal meet-and-greet function at registration on the Sunday evening, the formal proceedings opened on Monday morning with the

WITS Choir's rendition of our national anthem, followed by several traditional songs. Thereafter Bruce Rubidge welcomed delegates to both our university and our country. The President of IAAP/AIPA, Bechir Ben Tiba of Tunisia, expressed his thanks on behalf of the Association, and Ann Cadman thanked the donors who had provided sponsorship for various delegates: FRD, Anglo-American and De Beers Chairman's Fund, Gencor, and Stella and Paul Loewenstein Educational Trust.

The scientific programme commenced with the keynote address by Professor James A Doyle of the University of California, speaking on "The rise of angiosperms as seen in the African Cretaceous pollen record". As the enigma of angiosperm origins is dear to the hearts of all palynologists, this topic represented a unifying theme for the Symposium, and set the scene for a fruitful and interactive week to follow. This notwithstanding the fact that delegates' interests and research fields spanned the entire geological column, and ranged across into aerobiology and the allergy-related sphere as well. Papers ranged from subjects such as "Regional stratigraphy and palynology of the Devonian system of Saudi Arabia", through "Taxonomic significance of pollen apertures in some African Boraginaceae" to "Aeropalynological studies on the atmosphere of Mansoura city, Egypt".

Entertainment was not neglected: first, Professor R.W. Charlton hosted a cocktail party at the BPI. Later in the week delegates were impressed by a field excursion to Sterkfontein, where Cathy Kuman of the Archaeology Department explained the research programme, and Louis Scott of the University of the Orange Free State, and Marion Bamford spoke on their research involvement in the site. John Olivier and colleagues from the Krugersdorp Rotarians provided a tasty braai in the evening.

A trip to Gold Reef City sparked much excitement, particularly the underground visit. The grand finale of the social calendar was the official

dinner, held at the Gramadoelas Restaurant.

Apart from the week's programme, delegates were also able to join two excursions, one pre- and one post-symposium. The latter was a one-day outing to the Makapansgat sites, attended by 33 participants, and the former was a ten-day excursion covering a circular route round the country, via Springbok, Cape Town and Port Elizabeth – during the height of the spring flowering season; something to remember for years to come. Twenty-seven participants were whirled around South Africa on this trip, the object of which was to cover as many natural vegetation zones as possible. We were very fortunate to have the services of Professor Braam van Wyk of Pretoria University on the excursion – he totally astounded and amazed all delegates with his vast and intimate knowledge of our flora. The general consensus of people on the excursion was that it was the best they'd ever experienced, even though we only reached our overnight stops at about 8pm every night.

Now we are all winding down for the end of a very busy and productive year. Season's Greetings to all our colleagues and friends.

Ann Cadman and Mike Raath

JAMES BRINK, NATIONAL MUSEUM, BLOEMFONTEIN

(Our lines got crossed, but before all contact was lost we managed to save this snippet of news ED.)..... We have been in the field quite a lot over the last month and have been finding great things. The most amazing thing turned up in a site close to Cornelia in the same river system - we (Lee Berger, Spike McCarthy, John Hancox and myself) found a tusk of a flat-tusked proboscidean!!! I am at present cleaning the specimen, but it is beautiful already. The other good news is that we (the donga team, i.e. Lee

Berger, Steve Churchill, Lloyd Rossouw, myself and others) found another Cornelian site close to Florisbad on the Modder River. (*Sounds great-we look forward to hearing more from you James ED.*)

MARVIN CARSTENS, BPI

A question: Marvin is the paleo-artist at the BPI and he is doing models of dinosaurs (local and "american) in his private time to be sold. Although he has quite a quite few orders already, it would be nice to advertise. Do you allow advertising in the PAL News? (*YES WE DO ED.*)

Thanks Michelle & Marvin Carstens.

BILLY DE KLERK - ALBANY MUSEUM, GRAHAMSTOWN

Our mid year field season kicked off to a good start in mid June when Cathy Forster, Scott Sampson and five of their graduate students (from the State Univ. of New York at Stony Brook) arrived in Grahamstown. We spent a week in the lab and then headed for the Addo Elephant Game Park camping site which served as our base for the next two weeks. Anusuya Chinsamy-Turan and Callum Ross also joined us for a spell of reconnaissance of exposed Kirkwood Formation sediments including outcrops in the Addo Park. We covered a lot of ground between Port Elizabeth to Uitenhage/Dispatch and in the Kirkwood village area. Unfortunately we were not rewarded with another fine dinosaur discovery like we had in 1996 but never-the-less we were able to collect more disarticulated ornithopod material from the Kirkwood Cliffs. With all this new vertebrate material being accessioned into our collection I've had to set up a preparation lab at the Museum. This I've done over the past six months

and I now have three very enthusiastic volunteer preparators working on a part-time basis. Priscilla Hall, Magreet Koch and Toni Metcalf (who travels up from Port Alfred, 60km away) are all keen amateurs. They are really keeping me on my toes and are insisting on more field trips. A highlight for me over these past few months was my trip to the US. At the beginning of September I packed up "Kirky", our small theropod dinosaur, and flew off to New York. Carrying a dinosaur as hand luggage is no joke. I made up two "travelling suitcases" and was confronted at all airport security scans and asked to open up! Dense rock apparently looks like a bomb. Customs and security personnel were then very intrigued - I eventually got the process of unpacking and repacking the beast down to a fine art as I must have done it at least six times. While in New York I was based at the Stony Brook University Medical School on Long Island working with Cathy Forster, Callum Ross and Scott Sampson. We made a number trips into The Big Apple to work at the American Museum of Natural History to do comparative studies with other theropod material. In early October we flew to Chicago where I attended the 57th meeting of the Society of Vertebrate Paleontology (SVP'97). Again Kirky came along for the ride as I wanted to solicit comment on the beast from some of the theropod fundis that would be at the meeting. SVP was a blast!! - It was non-stop activity from 8:30am to 10:30pm each day and then it was off to the Blues and Jazz clubs until 2am. The meeting was multifaceted with the first day being devoted to six separate symposia - each of which focused on topical, and sometimes controversial, topics in Vertebrate Palaeontology and one had a choice of three parallel sessions. It was really nice to meet many palaeontologists who had only been a name in the literature before. I was the only South African delegate out of the 750 that were registered and by all accounts, according to those delegates who had been to many other SVP meetings in the past, this, the 57th meeting in Chicago, was by far the best - both from the content and quality of paper/poster presentations and from an organisational point of view. While in the US I was also able to visit many fine palaeontology

museum displays - they included the American Museum of Natural History in New York, The Field Museum of Natural History in Chicago, the Dinosaur State Park near Hartford in Connecticut and the Smithsonian Institution in Washington, DC. Well all good things (and money) do come to an end and so I returned home at the end of October and I'm now back in the AM saddle where its back to building a palaeontology gallery on a shoe-string. Gerhard Marx has completed a large "Lystrosaurus Zone" landscape painting and is now building a 6m long Massospondylus. Looking good!

HEIDI FOURIE - TRANSVAAL MUSEUM, PRETORIA

We are, as always, very well visited by scientists, both from abroad and locally. In the meantime, we are getting a new face. The extension of the two front wings of the Museum is reaching completion. The workmen are working frantically to get it finished before the builders holiday. At the moment the whale is being restored and will be hung right in front of the main entrance, which will also feature a granite ball which represents the planet earth with a water fountain. It has been two years of noise and dust. The Museum has now become more friendly towards the handicapped who will also be able to visit the Highveld and Lowveld biodomes when they are completed next year. My Magnus Opus is coming along well, and I have been granted three months of study leave by Management and my boss Dr. Thackeray. I hope to publish a lot of it next year.

NORTON HILLER, CHRISTCHURCH

Life in Christchurch continues to treat us all well and my little palaeo group at the museum is ticking along nicely. Our plesiosaur project progresses more slowly than I would like as I have been diverted, by

management, on to a new gallery project. However, my preparator friend is doing a sterling job on a second specimen that appears to be a new taxon. In his spare time he goes fossil hunting and his latest finds have generated some excitement. He has turned up the remains of several Paleocene birds that appear to be closely related to penguins. A colleague at the Institute of Geological & Nuclear Sciences is currently working on the material. My two associates whose work in the department with me are making great progress on their respective projects, - one on Devonian micro-vertebrate remains and the other on Jurassic bivalves. It was great catching up with some of the guys at the CAVEPS meeting in Perth. Hope we can repeat the show again soon.

Cheers for now, Norton

OBTUARY: ALAN CHARIG (1927-1997)

Dr Alan Charig was the curator of fossil reptiles and birds at the Natural History Museum, London from 1961-87. During that twenty-six year period he was very much at the centre of the British palaeontological scene as a research worker interested primarily in the evolution and origin of dinosaurs; and, by virtue of his position in the premier British museum, had an ideal opportunity to raise public awareness of fossils and the history of life. Alan was educated at Haberdashers' Aske's School and studied Zoology at Emmanuel College, Cambridge. From 1945-48 his National Service in the army included spells as a tank driver and a German-based Russian interpreter. He graduated from Cambridge in 1951 and wrote his doctoral thesis on the Triassic archosaurs of Tanganyika (Tanzania). In the mid 1950s he briefly lectured in zoology at Kumasi College, in what is now Ghana, before joining the staff of the Natural History Museum, working in the field of invertebrate palaeontology in 1957. He became curator of fossil reptiles, amphibians and birds

in 1961 and principal scientific officer three years later. Dinosaurs are probably the among first things that spring to mind whenever the Natural History Museum is mentioned, and it is probably correct to say that Alan Charig was very much in the vanguard of the popularisation of dinosaurs that has become so evident today. In the early 1970s Dr Charig presented a ten-part TV series on fossils and the history of life for the BBC which was entitled *Before the Ark* (1974). In the late 1970s he published a semi-popular book *A new look at the Dinosaurs* (1979) which proved to be enduringly popular, and was translated into several languages. He was also unstinting in his efforts to popularise his area of interest and research through public lecturing tours both in this country and abroad; in this area he too was a consummate expert, bringing to his lectures not only his breadth and depth of knowledge, but also a delightful facility for the anecdote or happy (some times positively hilarious) reminiscence which showed him to be a scientist with a very humane side. Alan's public face was what he considered to be a necessary adjunct to his scientific rôle within a museum which prided itself on its scientific reputation and its public accessibility. Such public and (in a sense) private rôles are not always easy bed-fellows and there were times when the tension between these two facets of his life caused some difficulties during his career. However working on dinosaurs, and closely related topics invites public interest in many ways - whether wished for or otherwise. He will probably be best remembered for his involvement in the discovery and description of one of the most extraordinary dinosaurs to have been discovered on these shores: the curious fish-eating, gaff-clawed, *Baryonyx walkeri*. This dinosaur skeleton, now on display in the dinosaur gallery of the Natural History Museum, was discovered in a clay pit just South of London in the early 1980s. One of the most extraordinary facts about this dinosaur, apart from its remarkable diet, is that it was discovered in rocks that have been explored for well over 200 years - during which time not the slightest inkling of its existence had been gained; this is perhaps a salutary lesson for all we fossil re-

searchers. It is gratifying, to himself and his memory, that the long-awaited monograph on *Baryonyx* was published just before he died. Alan will perhaps also be remembered for publicly locking horns with Sir Fred Hoyle over the topic of the Natural History Museum's most famous fossil - *Archaeopteryx*. An exceptionally well-preserved fossil, this comes from the fine-grained limestones of Bavaria and preserves rather exceptional evidence of feathers on its wings, but rather intriguingly tail bones, teeth and claws on its wings that hint at its reptilian (probably dinosaurian) ancestry. This famous Darwinian "missing link" was declared to be a fake by Sir Fred, not only that, but a fake that had been covered up, knowingly, by the staff of the Natural History Museum. Such claims were grist to Alan's mill. He immediately set out to examine, and then painstakingly refute all of Sir Fred's evidence and interpretations in public and scientific journals almost like a forensic pathologist teasing every last bit of information out of the "corpse" of Sir Fred's theory. Alan, in many respects, was annoyed at having to waste his time with such refutations, and yet, and yet, I have to say that they fed on many of his scientific attributes: notably a keen eye for detail and a constantly questioning, almost nagging persistence, for information and ultimate "proof". I believe that Alan was never able to adequately reconcile the nature of the subject that he loved, palaeontology, with its infuriating habit of frustrating the seeker after truth. Alan's African connections pervaded his academic life. From his thesis on the Manda archosaurs, through expeditions to Zambia & Tanzania in 1963, and to Lesotho in 1966/7. The discoveries of *Megazostrodon*, and *Heterodontosaurus* were high points from these expeditions, and he enjoyed his connections with many friends and colleagues across southern Africa. Above all Alan Charig was a charming, witty, kindly, savagely critical, blinkered, biased, and at times absolutely infuriating man - so how could you do anything other than like the man. Who of us that knew him can ever forget those damned phone calls? How much he must have underpinned the profitability of the telecommunications industry, I shudder to think. Alan is gone now, he has left a hole by departing, but he has enriched us in many ways by what he left behind and he will be missed.

Alan Jack Charig MA (Cantab), PhD., C. Biol., Fl. Biol. Born 1 July 1927. Died 15 July 1997. Educated Haberdashers' Aske's Hampstead School, Emmanuel College Cambridge, Army Service 1945-48, Lecturer Kumasi College, Gold Coast (1955-56), Palaeontologist at the British Museum (Natural History) 1957-1987. Married to Marianne (1954-87) whom he survived, and is succeeded by three children (Nicola, Francis and Mark).

David Norman (Cambridge)

PSSA 98

**10th conference of the Palaeontological Society of Southern Africa
PSSA 98**

14-18 September 1998

Geological Survey of Namibia, Windhoek

FIRST CIRCULAR AND CALL FOR PAPERS

Conference dates: confirmed as Monday the 14th through to Friday the 18th September 1998.

Venue: the conference will be held in the Geological Survey of Namibia auditorium.

Excursion: A field excursion to southern Namibian fossil sites is planned. Please contact Roger Smith (rsmith@samuseum.ac.za) with suggestions. Proposed itinerary for 4 day post-conference field excursion (19-23 September 1998) of sites that can be reached with minibusses which will have to be supplied by the participants:

Day 1. Windhoek to Tses district, Ganiobis Early Permian Dwyka fish

fossil locality (Fiona Evans, Roger Smith) stay at Keetmanshoop.

Day 2. Keetmanshoop to Aus, Nama body fossils in Aus district (John Almond, Bob Brain) stay at Aus.

Day 3. Aus- Oranjemund-Lower Orange River Cenozoic vertebrate localities- Auchas, Arrisdrift and Rooilepel (Martin Pickford and Brigitte Senut). Stay at Oranjemund.

Day 4. Oranjemund to Noordoewer, Lower Orange River Lower Karoo vertebrate and trace fossil localities (Roger Swart and John Almond) stay at Noordoewer.

Day 5. Disperse.

Papers: The Organisers of PSSA 98 invite you to offer a paper or poster for consideration for the Conference programme. An abstract must be submitted for each paper or poster offered. Papers are invited on any aspect of Palaeontology, including: Applied Palaeontology, Taxonomy and Systematics, Evolution, Taphonomy, Biostratigraphy, Biogeography, Palaeoecology, Palaeoenvironments and Palaeoclimates. Allow a total of 15 mins/paper, including questions.

-----tear off-----

Please return this form no later than 28 February 1998 to:

Patrick Bender PSSA 98, Geoscience Museum, P.Bag X112, Pretoria, 0001, South Africa

(tel: 012 322 7122; fax: 012 322 7939; email: bender@tm.up.ac.za)

Name (Last, first):

Contact address:

Please mark [X] the appropriate space: I wish to offer a Paper. _____

Poster _____

Title: _____

NOTE: Please send your abstract, not later than 28 February 1998. Abstracts as hard copy (typed), or digital copy (Wordperfect/Wordperfect compatible/ASCII text). Emailed abstracts will be acknowledged within 3 working days. If you receive no acknowledgement, send it again.

If sent by other means and not acknowledged by 31 March 1998, contact Patrick Bender.

Accommodation: Will be at: Hotel Safari- opposite conference venue.

Tourist class rooms-

Per person single, bed+full breakfast R 280. Per person sharing Twin beds, bed+breakfast R 175. Budget rooms- Per person single, bed+breakfast R 230. Per person sharing twin beds, bed+ breakfast R 145. They have ample accommodation- please make your reservations directly with the Hotel Safari. e-mail safari@iwwn.com.na; Tel 09264-61-240240; Fax 09264-61-295652

PO Box 3900, Windhoek, Namibia.

Registration:

-----tear off-----

Preliminary Registration Forms

Please return this form no later than 28 February 1998 to:

Roger Smith PSSA 98, Earth Sciences Division, South African Museum, PO Box 61, Cape Town 8000, South Africa. (Tel: 021 243330; fax: 021 24 6716; email: rsmith@samuseum.ac.za)

PSSA 98

Windhoek, Namibia

14-18 September 1998.

Title: _____

Name (Last, first):

Institutional affiliation:

Student?

I intend to take part in PSSA 98

Any accompanying persons?

If yes, number

I will be presenting a

Paper

Poster

Title:

Are you interested in taking part in the Post-Conference excursion?

Contact details:

Full postal address: _____

Tel and Fax: (incl. International code) _____

Email: _____

SOUTH AFRICAN MUSEUM, KAROO PALAEO LAB

This has been a busy year for the Karoo team at the SAM with lots of field trips and "palaeo wagon" demonstrations to help break the monotony of preparation. Annelise Crean now has some help in the prep lab from Kerwin van Willingham, Georgina Skinner and Hedi is busy doing a 3-D archaeological-style excavation of a large (3.5x 1m) *Lystrosaurus* Zone bonebed which contains at least 11 jumbled skeletons with some very interesting minute peg-like teeth lying around the larger bones. Annie and I went back to southern Madagascar for 3 weeks in April/May to finish off documenting the sediments and fossils of latest Permian lacustrine strata of the uppermost Lower Sakamena Formation, we were ably guided by Nicolas Rakotosolofo, a student. In June we took two of Jim Hopson's students, Richard Blob and Laura Panko, to the Fraserburg footprints to do some detailed topographic mapping of the ?dinocephalian and ?*Diictodon* trackways. Sub-zero temperatures were combatted with Pep stores blankets. The 6th International Conference of Fluvial Sedimentology was held in Cape Town 22-26 September and was well attended by some 270 delegates from 47 countries. I was the programme co-ordinator for the conference, which had 5 parallel sessions. A week was spent helping Fiona Evans to document Dwyka interglacial fish fossil localities in the Kalahari Karoo Basin of Namibia. Lots of fantastic nodule-bound fishes in many different taphonomic states. Many thanks to Roger Swart and NAMCOR for their assistance. The Earth Sciences Division has continued to make every effort to increase public awareness of past life on Earth through our demo-wagon which is a fully functional mobile fossil laboratory. This has been brought out on several occasions for school science workshops.

RECENT PUBLICATIONS:

- SMITH, RMH, TURNER, B.R., HANCOX, J. AND GROENEWALD, G. (1997). Evolving fluvial landscapes in the main Karoo basin. Guidebook 6th International Conference on Fluvial Sedimentology, University of Cape Town, South Africa, 162pp.
- SMITH, RMH AND TURNER, B.R. (1997) Reading the rocks around Cape Town. A geological guide to selected roadside stops on the Cape Peninsula. Guidebook 6th International Conference on Fluvial Sedimentology, University of Cape Town, South Africa, 49pp.
- SMITH, R.M.H AND KITCHING J. (1997), Sedimentology and vertebrate taphonomy of the Tritylodon Acme Zone: a reworked palcosol in the Early Jurassic Elliot Formation, Karoo Supergroup, South Africa. *Palaeogeog., Palaeoclimatol., Palaeoecol.*, 131, p. 29-50
- SMITH, R.M.H. AND KEYSER, A.W. (1996) Biostratigraphy of the Tapinocephalus Zone. In: Rubidge, B.R. (ed.) Biostratigraphy of the Beaufort Group (Karoo Supergroup). S.A.C.S. Biostratig. Series 1, pp. 8-12
- SMITH, R.M.H. AND KEYSER, A.W. (1996) Biostratigraphy of the Pristerognathus Zone. In: Rubidge, B.R. (ed.) Biostratigraphy of the Beaufort Group (Karoo Supergroup). S.A.C.S. Biostratig. Series 1, pp. 13-17
- SMITH, R.M.H. AND KEYSER, A.W. (1996) Biostratigraphy of the Tropidostoma Zone. In: Rubidge, B.R. (ed.) Biostratigraphy of the Beaufort Group (Karoo Supergroup). S.A.C.S. Biostratig. Series 1, pp. 18-22
- SMITH, R.M.H. AND KEYSER, A.W. (1996) Biostratigraphy of the Cistecephalus Zone. In: Rubidge, B.R. (ed.) Biostratigraphy of the Beaufort Group (Karoo Supergroup). S.A.C.S. Biostratig. Series 1, pp. 23-28
- SMITH, R.M.H. AND EVANS, S.E. (1996) New material of Youngina (Reptilia: Diapsida) and evidence for juvenile aggregation in Permian diapsids. *Palaeontology*, 39(2), pp. 289-303

FRANCIS THACKERAY, TRANSVAAL MUSEUM

This year I have been following up the issue of "probabilities of conspecificity", using a technique applied to both hominids and therapsids. I had an item on this topic published in *Nature* (November 6, 1997). The implications have been discussed at various venues: at the Transvaal Museum; at the Department of Anatomical Sciences at Wits; at University College London where I presented a seminar in late November; and at the

Institute of Human Palaeontology in Paris, where I served as a member of the jury for the dissertation defence by Valerie Galichon, at the invitation of Prof Henry de Lumley and Prof Yves Coppens. (Valerie has obtained some exciting results based on CT scans of South African hominid ilia). I am very grateful to the French Embassy and Prof Henry de Lumley for the trip to France in November. It has been quite exciting to reassess hominids (notably specimens attributed to early Homo and "robust" australopithecines), and therapsids (notably specimens attributed to various species of *Lystraosaurus*), in the context of a simple but potentially powerful morphometric technique. The same technique has been applied to large samples of extant taxa, studied by a "Transvaal Team" of 14 people, results of which were published in a multi-authored paper (Thackeray et al, 1997, April issue of the S.A. Journal of Science), which has provided a frame of reference for assessing probabilities of conspecificity in extinct taxa. I have applied the technique to type specimens of *Australopithecus robustus* and *A. boisei*; as well as to type specimens and paratypes of *Lystrosaurus*. I am very grateful to Angela Milner of the Natural History Museum in London for the opportunity to study the type specimens of *L. murrayi* and *L. declivis*, described respectively by Huxley (1859) and Owen (1860). It was somewhat unfortunate to see the type specimen of *L. murrayi* in several pieces, having been sectioned by Huxley in the year in which Darwin's *Origin of Species* was published. Specimens attributed to *L. murrayi* by Broom, housed at the Transvaal Museum, are rather better reference specimens for this taxon.

TRAINING SKILLS OBTAINED IN FRANCE

Annie Vorster from the Transvaal Museum as well as Stephen Motsumi from Sterkfontein had a two month training stint at the Natural History Museum in Paris. They have picked up valuable skills in preparation and casting of fossils. Sincere thanks to the French Embassy in Pretoria; the French Government, and staff of the museum in France, especially Brigitte Senut and Martin Pickford.

ANNE WARREN, LA TROBE UNIVERSITY, MELBOURNE,
AUSTRALIA

The vertebrate palaeontology laboratory has collective amnesia as to the date of our last contribution to Palnews so please forgive any repeat of old news. Anne Warren has been concentrating on the new Early Carboniferous fauna including tetrapods discovered by Sue Turner and Tony Thulborn in the Ducabrook Formation, Drummond Basin, Queensland. Although most of the material is (sigh!) fish, and all of it is disarticulated, the bone is well preserved, uncrushed, and easy to prepare. The fish include mostly rhizodont pectoral girdle and skull plates, a fair number of lungfish of *Ctenodus*, microbits of various sharks and palaeoniscoids, and Gyracanthides in quantity. An Honours student, Bryan Currie, has just submitted his thesis on the Gyracanthides based on a redescription of *G. murrayi* from Mansfield. The tetrapods are the only indication of Early Carboniferous tetrapods from Gondwana, and include the only Gondwanan anthracosauromorph as well as a possible colosteid, also a first for Gondwana. Anne has not quite forsaken the Triassic and is hoping to attend the PSSA meeting in Namibia and talk about the tiny tupilakosaur skulls from the Karroo which turned up 'in the back of a drawer' in the University of California Museum of Paleontology, Berkeley. These were part of Peabody and Camp's collection from 1947.

The graduate students are all going well. Caroline Northwood now has her PhD and has just returned from the VPCA meeting in Derby and SVP in Chicago where she demonstrated how much we don't know about coprolites! Ross Damiani was also at SVP where he presented his new capitosaur phylogeny (they're not capitosaur, they're mastodonsaur).

Adam Yates is about to submit his megaphylogenetic analysis of higher temnospondyls in which he establishes the monophyly of the stereospondyls. Both Adam and Ross should finish their theses mid 1998. A new Honours student, Scott Hansakker, will begin to sort out the rhytidosteid stereospondyls in December, beginning with the preparation of new material from the Arcadia Formation sites. The most important member of the La Trobe team, Joanne Ford (ex Capetown), has been preparing both the Dukabrook and Arcadia material as well as some tricky needle work with Greenland plagiosaur, and has done a wonderful job with the appalling Karroo matrix on the tupilakosaur. Yes, she is interested in a job back in South Africa as a preparator.

YEAR OF SCIENCE AND TECHNOLOGY -1998

Please note: We would welcome any input, particularly w.r.t. scientific content and contact persons. Obviously this project should benefit archaeology and palaeontology in this country.

**INFORMATION BRIEF CONCERNING THE
ARCHAEOLOGY/PALAEONTOLOGY THEME FOR THE THE
YEAR OF SCIENCE AND TECHNOLOGY 1998: promoted and
managed by the Council for Geoscience
(contact people: D Barnardo and P Bender).**

The Year of Science and Technology is a national drive to promote science education; generate public interest in science, technology and engineering; and to offer organisations and individuals the opportunity of exposing the public to the involvement of science, engineering and technology in their daily lives. All 8 provinces, each with a provincial coordinator, are to arrange various focus week events. The Department of

Arts, Culture, Science and Technology (DACST) requested each of the 8 National Science Councils to be responsible for the special promotion of a particular "thrust area" during 1998, each focussing on 3 provinces, but with national participation where possible. The Council for Geoscience will manage an Archaeology and Palaeontology theme; a consortium of stakeholders and participating parties is involved. At this stage it is uncertain what the total budget allocation will be (DACST responsible). But our project proposal has been approved. Details of the proposal are as follows:

PRESENT PROJECT WORKING TITLE: The earth I live on...(based on "understanding the land/earth we live on", "understanding your environment", "secrets of the earth").

AIMS AND OBJECTIVES: The project aims to stimulate interest and highlight the importance of archaeology and palaeontology by examining known surroundings and everyday user items specific to earth science processes and earth products. We plan to reach all South Africans (including, as far as possible, pre-school children and disabled people), with youth, women and workers identified as specific target groups. The stakeholders feels it is essential to reach out into areas not addressed before, in particular rural areas, various relevant languages to be utilized, where necessary.

CONTENTS: Three aspects to the project have been identified:

1. A series of video productions.
2. Educational kits, consisting of objects and printed material, specifically aimed at school children.
3. Teacher workshops (schools) aimed at promoting the earth sciences, bearing in mind the proposed school curriculum changes (eg. Curriculum 2005).

We believe all three aspects should be integrated, with the video production theme, layout and content pointing the way for the other two aspects.

PROJECT THEMES, CONCEPTS and CONTENT: The approach must be "catchy", exciting and dynamic to the majority of South Africans. Try to utilize the narrative approach, where appropriate (viz. African traditions). In terms of scientific information content: We need to focus on South African archaeology and palaeontology.

The theme can practically be split into two focus areas:

A. Science - how palaeontology and archaeology use science, what makes them earth sciences. (Eg. Science roots-early/African myths, how these tie into the present topics).

B. Technology and Engineering - how arch/pal utilize or contribute to technology. Take what youth/women/workers in (particularly rural south Africa) understand and utilize in their environment (fuel (coal), pots, implements, food items etc, relate to: economic minerals (clay, coal, building materials (stone, sand), diamonds, gold, silver, iron, copper, lead, tin)) and how they can be related to arch and/or pal.

Scientific Content: An outline of the scientific information to be dealt with/of importance and the scientific contact persons:

Basic themes: First Forms of life and early life forms (algae, Cambrian life), remember the recent Mars-life debate (Dr Bob Brain); Coal-fossilized plant remains, fossil pollens (Dr Barry Millstead); Early vertebrate animals (fish, mammal-like reptiles) (Dr Roger Smith, Dr Francois Durand, Professor Bruce Rubidge, Patrick Bender), what these fossils tell us (biostratigraphic dating, uranium exploration); South African dinosaurs (recent E Cape finds), crocodile ancestors (Dr Anusuya Chinsamy-Turan, Dr Billy de Klerk); Plio-Pleistocene mammals, including hominids, palaeoclimates (Dr Ina Plug, James Brink, Dr Francis

Thackeray); Stone Age technology, Iron Age technology (wood-charcoal, furnaces, smelting), Early Mining, Clay objects and technology (Dr Ina Plug, Drienie Beukes, Amanda Esterhuizen, Ian Ward, Prof A Meyer, J van Schalkwyk, Dr U Kusel, Baltie du Plessis, Francois Coetzee, Zoe Henderson, others?).

Important scientifically important sites or localities will be selected and used, for example:

Early life forms - Barberton, southern Namibia; Coal mines - Mpumalanga; Early vertebrates - the Karoo region; Dinosaurs - E Free State, E Cape, Limpopo Valley, Zimbabwe; Plio-Pleistocene mammals - Sterkfontein, Swartkrans, Makapansgat, Langebaan lagoon, Florisbad; Archaeological sites - Mapungubwe, Greater Zimbabwe, Lydenberg, others?

DSSA MEMBERS ON EMAIL:

This list will be updated on a regular basis as I receive new or changed addresses.

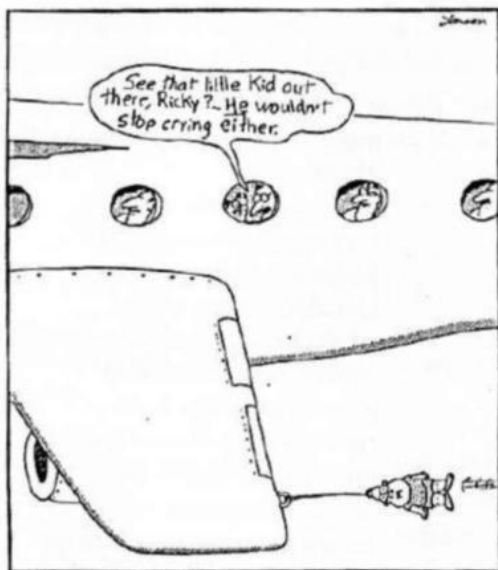
Dr. Eric Anderson:	ihma@giraffe.ru.ac.za
Dr. Graham Avery:	bcage@uctvax.uct.ac.za
Patrick Bender:	bender@tm.up.ac.za
Dr. Lee Berger:	055parg@chiron.wits.ac.za
James Brink:	florisbd@internext.co.za
Dr. Anne Cadman:	106CAA@cosmos.wits.ac.za
Marvin Carstens:	myilestone@cyberden.co.za
Dr. Anusuya Chinsamy-Turan:	achinsam@nvl.samuseum.ac.za
Dr. Arthur Cruikshank:	aric1@leicester.ac.uk
Dr. Billy de Klerk:	amwd@giraffe.ru.ac.za
Ludwig Doehne:	doehne@global.co.za
Heidi Fourie:	fourie.h@tm.up.ac.za

Dr. Chris Gow:	106GOC@cosmos.wits.ac.za
Pippa Haarhoff:	phaarhoff@nvl.samuseum.ac.za
Prof. AV Hall:	avhall@uctvax.uct.ac.za
Prof. Eric Harley:	harley@chempath.uct.ac.za
Dr. Norton Hiller:	nhiller@cantmus.govt.nz
Madel Joubert:	mjoubert@samuseum.ac.za
Dr. Herbert Klinger:	hklinger@nvl.samuseum.ac.za
Dr. Kevin Kykendall:	055klks@witsvma.wits.ac.za
Elizabeth Latimer:	106eml@cosmos.wits.ac.za

Johan Loock:	geoci@rs.uovs.ac.za
Dr. Tom Mason:	trm@armagh-planetarium.co.uk
Dr. Jeff McKee:	95@osu.edu
Dr. David Norman:	dn102@esc.cam.ac.uk
Dr. Gideon Roso:	uwzlagjr@zoo.upe.ac.za
Dr. Bruce Rubidge:	106gar@cosmos.wits.ac.za
Prof. Izac Rust:	glaiet@orca.upe.ac.za
Dr. Friedmann Schrenk:	schrenk@hrzpub.th-darmstadt.de
Dr. Brigitte Senut:	bsenut@cimrsl.mnhn.fr
Dr. Russell Shone:	glarws@orca.upe.ac.za
Dr. Roger Smith:	rsmith@nvl.samuseum.ac.za
Dr. Francis Thackeray:	mrsples@global.co.za
Dr. Juri van den Heever:	javdh@maties.sun.ac.za
Dr. Anne Warren:	zooaw@zoom.latrobe.edu.au
Dr. Johan Welman:	kvertpal@internxt.co.za

Reminder:

Deadline for contributions for the next issue of PAL NEWS is 15th May 1998 (Preferably e-mail, otherwise on disk. We are using Wordperfect 6.1 (Ed)).



*The
Far Side*

By simply attaching the new ACME Wingbaby, airlines can significantly improve their passengers' overall comfort.

