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# C OFFICIAL BUSINESS C

## **GOVERNMENT LIAISON COMMITTEE ANNUAL REPORT, 1997**

The GLC continues to monitor congressional activity regarding the potential introduction of legislation designed to promote access of commercial collectors to federal public lands. At the moment this seems to be in abeyance, but the GLC predicts that interest and pressure in this regard on the part of the commercial community will only increase following the auction of ASue.@

The GLC is working with the Paleontological Society (PS) and The Dinosaur Society to devise an Aomnibus@paleontological resource protection bill for congressional approval. The GLC recognizes the efforts in this regard shown by the PS Council and by The Dinosaur Society, and looks forward to a positive and constructive bipartisan result.

The auction of ASue@at Sothebys brings into focus a sense of great concern regarding the future health and productivity of the SVP. The GLC predicts that the exorbitant price paid for ASue@will not only result in the above-mentioned activity on the part of commercial collectors but also will be reflected in increasingly high prices demanded by private land owners for all users of their land.

Therefore it is paramount for all members of SVP to put as part of their normal job descriptions a charge of entering the political process. Thus, that means that each SVP member should set aside a definite segment of time in their normal activities to contact local and state congress people, to inform them of the goals and interests of SVP, and to secure their aid in furthering the interests of SVP in all areas, but especially in preserving for the public trust fossil vertebrates contained on federal public lands. (Michael O. Woodburne)

## HONORARY MEMBERSHIP

#### **Chang Meeman**

I feel much honored to be granted Honorary Membership in the Society of Vertebrate Paleontology. I would like to thank all colleagues who gave me their support and trust.

To tell you the truth, vertebrate my own career choice. I was asno other alternative but to accept vertebrate fossils, especially after people working on them, I began That is somewhat like what we within the arranged marriage. Of more rational than romantic. as a vertebrate paleontologist, do not regret at all this Aarranged all over again I would choose profession without any hesitation. arranged marriages but rather to

Through my work on realize that there is, perhaps, no more Anternational@than vertewe study have lived and evolved years ago and knew no paleontology was originally not signed to it and at that time I had it. Fortunately, with my study of I got to know more and more to fall in love with the discipline. say in Chinese, Ato cultivate love course, this kind of love is often After more than 40 years working what I=d like to say now is that I marriage.@If I could start my life vertebrate paleontology as a This is not meant to endorse encourage blind dates!

vertebrate fossils, I came to other branch of science which is brate paleontology. The objects since hundreds of millions of boundaries of countries which

were set up almost at the very end of life history. Many problems we deal with can only be solved on the global background, beyond the borders of countries. This characteristic of vertebrate paleontology requires us to work together. With members from all continents, the Society of Vertebrate Paleontology plays an important role in this respect. I myself and my colleagues from the IVPP have benefited a lot from the SVP in sharing information, collaborating with colleagues from many countries and in learning from them.

I regret very much that a bicycle accident prevented me from attending this meeting. (Many who visited us in Beijing were surprised at the streets swamped with numerous bicycles and yet wondered why they haven  $\pm$  come across any bicycle accidents. Now here is one!)

I = d like to take this opportunity to thank all those who are present at the meeting for your help to me and to the IVPP.

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## **ROMER PRIZE HONORABLE MENTION**

In announcing the Romer Prize winner at the 1997 SVP meeting in Chicago I inadvertently forgot to report an honorable mention award, so I would like to note that Jean-Louis Monfraix of the University of Florida was awarded an honorable mention by the Romer Prize Committee for his talk, APaleoecological interpretation of the Leisey Shell Pits, Early Pleistocene of Florida, based on a quantitative model of mammalian community structure. I would like to offer both my congratulations and my apologies to Mr. Monfraix for his excellent presentation and my oversight. (Judd Case, Chair)

## **REGIONAL EDITOR NEEDED FOR PACIFIC COAST REGION**

George Callison, who has served the Society as Pacific Coast Regional Editor for the *SVP News Bulletin*, has, after many years of service, asked to relinquish this office. We would like to take this opportunity to thank him for his expert and unfailing assistance and wish him well in Colorado.

The *News Bulletin* is, therefore, in need of a replacement for George. If you are interested to serve the Society as Regional Editor for the Pacific Coast Region (Alaska, California, Hawaii, Oregon, and Washington), please contact Mary Ann Schmidt, Managing Editor (schmidtm@clpgh.org). Responsibilities include soliciting institutions for reports, assembling and editing contributions, and meeting the submission deadline for each issue.

#### ERROR IN ADDRESS DIRECTORY

An oversight has occurred in the 1998 Address Directory and I am at fault. The guide letters at the tops of the odd-numbered pages in the alphabetical section are incorrect. Instead of listing the first three letters of the names of the last listings on those pages, I inadvertently used the first three letters of the **first** listings. Please accept my humblest apologies. (Mary Ann Schmidt, Managing Editor)

# FINANCIAL STATEMENTS AND INDEPENDENT AUDITOR S REPORT FOR THE YEARS ENDED SEPTEMBER 30, 1997, and 1996

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# C NEWS FROM MEMBERS C

## BRAZIL

*Museu Nacional/UFRJ, Rio de Janeiro* **B***Paleovertebrate Sector, Department of Geology and Paleontology* During the last year (1997), the Paleovertebrate Sector of this Museum was involved in several new activities, some done in collaboration with researchers of other institutions.

Deise Dias Rego Henriques studied the paleopathology of Pleistocene mammals, a task she intends to continue this year. She also worked very hard on the organization of the fossil vertebrates of our collection.

Luciana Barbosa de Carvalho, after starting as a Visiting Professor in our Department (February 1997), made thin sections of mosasaur and marine crocodilian teeth. In collaboration with others, she has also started some thin sections of dinosaur eggs, with some interesting results. Those results are the basis of a paper reviewing Brazilian dinosaur eggs which should be submitted this year. With Sergio Alex, she finished the description of some plesiosaur vertebrae. Furthermore, she continues to work on mosasaur systematics.

Sergio Alex Kugland de Azevedo is still very busy as the coordinator of the Graduate Program in Zoology of the Museum (an activity he wants to quit ASAP!). Even so, during 1997 he managed to get some research time working with Luciana on marine reptiles and with Valeria Gallo da Silva (UFRJ/Rio de Janeiro) on histological sections of teeth and scales from fossil fishes (paper in press). With Alexander Kellner, he also carried out fieldwork in the Triassic Santa Maria Formation.

After finishing his Ph.D. at Columbia University/American Museum of Natural History, Alexander Wilhelm Armin Kellner worked for several months in the Paleontological Sector of the DNPM until August 1997, when he got the job at this Museum. At the DNPM, with Diogenes de Almeida Campos, he mounted the cast of *Prestosuchus*, a primitive archosaur which was donated to this institution by the American Museum of Natural History (New York). At the Museu Nacional, he continued his research on pterosaurs and dinosaurs. Alex also organized the Brazilian fossils that will take part in an exposition of Gondwanan dinosaurs in Japan, scheduled to open in July 1998. With Sergio Alex and Cesar Leandro Schultz (UFRGS, Porto Alegre), Alex did some prospecting in the Triassic Santa Maria Formation and found some very interesting sites.

Besides the above, the team of the Paleovertebrate Sector of the National Museum carried out a field trip to collect fossil vertebrates in Late Cretaceous outcrops of the Bauru Group in Minas Gerais. This activity, including fieldwork in the Triassic areas (Santa Maria Formation), will continue this year. (Alexander Kellner)

## CANADA

#### **Canadian Museum of Nature**

The Paleobiology group at the CMN has been Aenjoying@a lot of media attention with the preparation and study of a ceratopsian dinosaur. Clayton Kennedy, Kieran Shepherd, and Rob Holmes are working on the specimen from Alberta, and hope to have it described (new genus?) soon. In the meantime, Paleobiology is expanding with the addition of Mike Caldwell and Darryl Bujold. Darryl is on an internship for the year and

will be working with Kathy Stewart, Donna Naughton, and Alison Murray mainly on African fish remains.

Mike Caldwell has now joined us in Ottawa. He continues his collaborative study of the origins and relationships of snakes. He recently returned from Argentina where he collected data on a number of new skulls and postcranial remains of the Cretaceous snake *Diniysia*. He and Mike Lee (Monash University, Australia) are currently writing up a short note and full-length monograph on that material. Caldwell, who, with Gordon Bell (School of Mines, South Dakota), was awarded a National Geographic Research Grant, will soon be traveling to New Zealand to collect mosasaurs from Southern Hemisphere K/T boundary sections. They hope to answer some questions on the Late Cretaceous extinction and paleobiogeography of these lizards. Mike is also continuing work on the Cenomanian dolichosaurs of Europe. Earlier work on snake relationships within squamates has indicated a sister-group relationship between snakes and basal mosasauroids; several papers on the dolichosaurians of the English Chalk are in press and address these questions much more closely. Finally, in his new role at the CMN, Mike is initiating a research program on Canada for southern Canada Sedimentary Basin, and the possibility of fieldwork in dinosaur-bearing sediments of southern Alberta.

Rick Day, Steve Cumbaa, Dick Harington, and Kathy Stewart are continuing in their roles as authors of, and scientific advisors for, books with Somerville House Publications (Toronto), with the release of the Neandertal book last fall (Steve and Kathy), the latest installment (no. 7, hadrosaur) of the ATiny Perfect Dinosaur Book & Bones@series (Rick) for release this fall, the mammoth book (Dick), and one on *Carcharodon* (Steve) for future release.

Dick Harington retired in May, but plans to continue his work at the Museum. Dick has been given a surprise award in Whitehorse. The Yukon Minister of Tourism responsible for Heritage, Dave Keenan, presented a plaque to Dick at the Eighth North American Caribou Workshop last week. It recognizes his 33 years of research on Yukon-s Pleistocene and late Pliocene fossil heritage. It also highlights his work on popular and technical literature, his help with museum exhibits, and his role in setting up the Yukon Beringia Interpretive Centre. The Director of the Yukon Heritage Branch, Jeff Hunston, says they also wanted to acknowledge his strong relationships with Yukon First Nations communities, placer miners, and the public at large. As he says, Awhen we heard Dick was retiring, we wanted to do something special for him.@(Alison Murray)

## Fundy Geological Museum, Parrsboro, Nova Scotia

During the first week of September 1997, preparation was started on a prosauropod specimen found in the McCoy Brook Formation, Early Jurassic deposits at Wassons Bluff, near Parrsboro, Nova Scotia. Progress made over a four-month period included the removal and cleaning of a fully articulated rear foot, location of an articulated front foot, and uncovering of the hips and numerous gastralia. Preparation of this specimen remains to be finished.

Also of importance was the location of a new specimen at Wassons Bluff, found in apparently the same

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bedding plane as the above-mentioned Aoriginal@prosauropod, about 4 m along the bed. A femur (53 cm long), a vertebra, and a radius(?) have been collected and prepared, and the sizes of these elements suggest these may be the largest dinosaur (prosauropod?) remains yet recovered in the Nova Scotia area. Identification and study are ongoing. This work has been generously supported by research grants from the Nova Scotia Museum and the Royal Canadian Geographic Society. (Tim Fedak)

## Redpath Museum, McGill University

After 35 years in preparation and assembly, and the loss of the original publisher in the final stages, Part 1 of the Encyclopedia of Paleoherpetology, Lepospondyli (Microsauria, Mectridea, Lysorophia, Adelospondyli, Aistopoda, Acherontiscidae) was finally published at the end of March, with chapters by Kathleen Bossy, Angela Milner, Carl Wellstead, Robert Carroll, and the late Mahala Andrews. The efforts of Verlag Dr. Friedrich Pfeil are greatly appreciated in continuing this series. The extremely thorough and comprehensive Part 4, Salientia, by Borya Sanchiz, was published at the same time. The volumes can be ordered from Verlag Dr. Friedrich Pfeil; Wolfratschauser Str. 27; D-81379 Munchen; Germany. Part 1, \$83.00; Part 4, \$100.00. Work is now concentrated on another collective effort, with a dozen authors: a review of the entire fossil record of amphibians, from the Devonian through the Pleistocene, to be published by Surrey Beatty Press, as volume 4 of the series Amphibian Biology, edited by Dr. Harold Heatwole.

At the level of primary research, Alison Murray is engaged in the preparation and casting of early Tertiary East African cichlids, while Jason Anderson is compiling databases for phylogenetic analysis of the entire Lepospondyli to complement his study of the aistopods. Bob Carroll continues work with Farish Jenkins and Denis Walsh on the broader investigation of the interrelationships and ancestry of the lissamphibian orders. One line of study being pursued with an undergraduate, Andrew Kuntz, and a summer student, Kimberley Albright, involves different patterns and rates of vertebral development in both Paleozoic and Recent amphibians. (Bob Carroll)

### **Royal Ontario Museum**

We have finally Apublished@our preliminary type catalog of fossil vertebrates on the Web. Check it out at http://www.rom.on.ca/palaeo/biology and look under AThe Collections.@The full invertebrate catalog was published in book form back in 1978, and so only an addendum (Brachiopoda) is on the Web. We call it preliminary because we are constantly disappointed at how many researchers use our collections and then do not inform us of identification changes, nor do they send us their publications indicating that new species have been described. We will not be surprised to learn we hold more type specimens than those on our Web listing. If you have used ROM specimens, or **any** museum specimens for that matter, we urge you to send copies of your publications to the collections manager of that institution.

We still have many copies of Athlon@Essays on Palaeontology in Honour of Loris Shano Russell,@a 286page hardcover festschrift edited by C. S. Churcher, which was published back in 1976 but did not receive wide circulation. There are papers by Dineley, Olson and Lammers, Carroll, Holman, Morris, Langston,

Sloan, Green and J. Martin, Turnbull, Storer, Tanner and L. Martin, Hooijer, Lundelius and Slaughter, A. Wood, and Hibbard. If you would like a **free** copy, just send us \$5 to cover postage (USA or Canada). We will be happy to send a **free** copy to colleagues overseas or students with limited resources. This book is still available from the ROM for \$35, so ask us first! Send your request to me at kevins@rom.on.ca. (Kevin Seymour)

## Royal Tyrrell Museum of Paleontology

Phil Currie has been spending most of his time working on the Afeathered@theropods of Liaoning, China. Several papers with Chinese and American Museum colleagues have been completed, and the scope of the studies is steadily expanding. Fieldwork in Argentina with Rodolfo Coria focused on the excavation of a theropod bonebed. At least five individuals of a new species related to *Gigantosaurus carolinii* are represented in the quarry. Ironically, we will also be excavating a theropod bonebed in Alberta during June. Parts of at least nine semi-articulated *Albertosaurus* individuals were collected from a site near Drumheller in 1910. Good progress has been made on the book with Fernando Novas on theropod anatomy and phylogeny (Johns Hopkins Press).

Michael Ryan continues to work at the Museum part time while pursuing his Ph.D. at the University of Calgary. He is currently continuing his research work on ceratopsians with recently published papers including Aontogeny of centrosaurine ceratopsids@with Scott Sampson and Darren Tanke in the *Biological Journal of the Linnean Society*, and Aceratopsid distribution@with Don Brinkman and David Eberth in *Palaios*. Forthcoming papers include a report on the first record of protoceratopsids in the Judith River Group in *Canadian Journal of Earth Sciences*, and a report of a possible site of small theropod predation on baby hadrosaurids in *Gaia*. Michael continues to work on dinosaur paleobiogeography focusing on ceratopsians and hopes to revive long unfinished fossil organic geochemistry work in the near future.

Betsy Nicholls recently returned from a month in Japan and Europe studying museum collections of Triassic ichthyosaurs. She extends her thanks to the many colleagues at these museums for their hospitality and assistance. This work is part of a project with Makoto Manabe (National Science Museum, Tokyo) on Triassic ichthyosaurs from British Columbia. This summer they are returning to the Pardonet Formation at Pink Mountain, British Columbia. Acid preparation of the shastasaurids from this locality is in progress.

David Eberth attended Dinofest in Philadelphia and gave a report on his work on giant ceratopsian bonebeds in Alberta. The work on these bonebeds will continue this summer in Dinosaur Provincial Park. Dave will also be working with Bill Straight this summer on the fossil-facies relationships in the Horseshoe Canyon of the Drumheller area. Don Brinkman continues to work on turtles with the current object of attention being a skull of a marine turtle collected in the Foremost Formation of southern Alberta by Ron Baier of Taber, Alberta. He is also nearing completion of the description of a skull and skeleton of a juvenile *Dinochelys* from Dry Mesa Quarry with Ken Stadtman and David Smith of Provo, Utah.

Two visiting scientists are currently working at the Tyrrell Museum. J. Jurum from the Paleontologisk Museum in Oslo is working on a review of the intramandibular joint in theropods. Stine Andersen from the

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Geological Institute at the University of Copenhagen, Denmark, is starting a master-s project on *Styracosaurus*. (Don Brinkman)

## FRANCE

#### Musée des Dinosaures, Espéraza

This is the first contribution from the Musée des Dinosaures to the *SVP News Bulletin*. The Museum opened in 1992 and is situated in southern France, 45 km south of Carcassonne (800 km south of Paris), in the foothills of the Pyrenees near the Spanish border. The collections of the Museum include a large number of Late Cretaceous vertebrates from southern France.

Eric Buffetaut no longer works at the Laboratoire de Paléontologie des Vertébrés of University of Paris VI, for the simple reason that this department no longer exists, having been closed by the university. The reasons for this are not worth telling here; suffice it to say that they have nothing to do with scientific research. Eric is still employed by the Centre National de la Recherche Scientifique (he never was on the university staff) and is currently working at home in Paris (correspondence to him or to his wife Haiyan Tong should be sent to the following address: 16 cour du Liégat, 75013 Paris; phone/fax 33 1 45 84 81 45; e-mail Eric.Buffetaut@wanadoo.fr). Because most of his research activity is now done with the Musée des Dinosaures, Eric shall report on it here. Eric and Haiyan have visited Thailand several times in 1997 and 1998, to work there with Varavudh Suteethorn and his team of the Thai Geological Survey. As usual, these field trips were quite productive. The Sao Khua Formation, which has now been shown to be Early Cretaceous rather than Late Jurassic in age, has yielded more and more dinosaur remains, including wellpreserved skeletons of *Phuwiangosaurus sirindhornae*, which may well be an early representative of the Nemegtosauridae. The older Phu Kradung Formation, probably Late Jurassic in age, is now yielding an interesting fauna containing temnospondyls, turtles, stegosaurs, hypsilophodontids, theropods, and probable euhelopodid sauropods. A new locality in the Khok Kruat Formation, of AptianBAlbian age, has vielded new hybodont sharks (studied by H. Cappetta, Montpellier, and, from a microstructural point of view, by Gilles Cuny, Bristol), as well as interesting giguanodontid remains. In addition, new Early Cretaceous theropod footprints have been discovered at two sites in northeastern Thailand.

Eric-s work on Late Cretaceous vertebrates from southern France has focused on a new locality, of probable early Maastrichtian age, at Cruzy (Hérault). The Cruzy fauna (which consists of both macro- and microremains) includes lepisosteids, frogs, salamanders, turtles, crocodiles, theropods, ornithopods, sauropods, and enantiornithine birds. A preliminary multi-authored report on this assemblage is in preparation, and the enantiornithine remains will be described in the first issue of the *Bulletin du Musée des Dinosaures* (see below). Recent papers on Late Cretaceous vertebrates from southern France include the description of a cervical vertebra of a huge azhdarchid pterosaur (with Yves Laurent, Jean Le Loeuff, and Michel Bilotte, in *Geological Magazine*, 1997), and that of the giant ground bird *Gargantuavis philoinos* (with Jean Le Loeuff, in the January 1998 issue of the *Journal of the Geological Society, London*.

Erics interest in pterosaurs also extends to Jurassic forms. He is currently describing a new crested form

(probably a germanodactylid) from the Kimmeridgian of Normandy, and Callovian remains, also from Normandy, will follow. Eric is also engaged in a joint description of pterosaurs from the Cenomanian of Morocco with Peter Wellnhofer (Munich).

Finally, Eric is working with the Museo Civico di Storia Naturale of Trieste (Italy) on a recently discovered vertebrate site of probably Santonian age on the Adriatic coast. This site has yielded several articulated remains of primitive hadrosaurids, which may shed light on the origin of terminal Cretaceous European hadrosaurs.

In 1997, Lionel Calvin defended his Ph.D. at the now-defunct vertebrate paleontology department of University Paris VI, on a new ichthyofauna from the Turonian of Goulmima, Morocco, and an analysis of the evolution of the worldwide diversity of ichthyofaunas between the Upper Jurassic and the Paleocene. He published new taxa of teleosts from Goulmima in the *Comptes Rendus de l*=*Académie des Sciences* and a paper on a small skull of an *Enchodus* contained in a fish gut (Palaeontology, in press). In September, he visited the Goulmima locality with geologists from the University of Toulouse in order to ascertain the stratigraphic position of the fish-bearing beds. Lionel is going on with the study of this rich ichthyofauna and is beginning a description of new fish specimens from a new Cretaceous Moroccan locality. He also continues his work on the rare fossil fishes from the Late Cretaceous continental sediments of southern France, notably the lepisosteids. He spent the summer working at the excavations of Campagne-sur-Aude and Cruzy looking for dinosaurs and other Late Cretaceous vertebrates.

Yves Laurent is going on with his doctoral thesis on the Late Maastrichtian vertebrate faunas of western Europe. Yves spent several weeks in the field in southwestern France looking for new localities. He has completed the description of new hadrosaurid material from the Corbières (with J. Le Loeuff and Eric Buffetaut, in press at the *Revue de Palébiologie*) and is preparing a new paper (also on hadrosaurs) from the Garonne valley, south of Toulouse. Recent fieldwork at Eocene localities of southern France has yielded new crocodiles and chelonians currently under study.

Jean Le Loeuff, as usual, spent most of his time attending to various administrative duties; the organization of the Second European Workshop of Vertebrate Palaeontology in Espéraza was another time-consuming business. The workshop, however, was a success with more than 60 participants from 15 countries. The EWVP seems to have become the main European rendez-vous of vertebrate paleontologists. Jean and Lionel are now preparing the publication of the first volume of a new VP publication, to be called, of course, the *Bulletin du Musée des Dinosaures d Espéraza*. The first volume will include 15 papers on various topics, such as Brazilian tapejarids, French enanthiornithines and chelonians, Dutch Maastrichtian reptiles, Spanish hadrosaurids, etc.

Summer excavations at the titanosaurid bone bed at Bellevue (Campagne-sur-Aude) have yielded many new specimens, including pterosaurs and small theropods. In 1997, Jean completed the first report on a titanosaurid megatracksite in northern Spanish Catalonia, with Albert Martinez-Rius (Barcelona). He is preparing the description of new enigmatic dinosaurian tracks of early Jurassic age from southwestern France. Jean has also published (with Eric Buffetaut) a new book for general readers about paleobiogeography since

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the Precambrian (Berg International, Paris, 1998). The description of the new Late Cretaceous French dromaeosaurid will appear in 1998 in *Palaeontology*. A synthesis on Late Cretaceous European dinosaurs should also appear this year in Gaia. Currently Jean is working on some new titanosaurid material from central France and he just completed a manuscript on the skull of *Ampelosauris atacis*.

Valérie Martin-Rolland is preparing the description of the Thai sauropod dinosaur *Phywiangosaurus sirindhornae*. Her paper on Chinese sauropods will be published soon. She is going on working with John Martin (Leicester) and Dino Frey (Karlsruhe) on sauropod biomechanics and paleobiology.

Marie Pincemaille has completed in 1997 a DEA about a new specimen of *Rhabdodon priscus* collected near Aix-en-Provence. She is now beginning a doctoral thesis about the osteology and phylogeny of *Rhabdodon*, based on a large amount of unpublished material at the Musée des Dinosaures and in several private collections.

Haiyan Tong works on turtles from various parts of the world. Her description of a new pleurodiran from the Eocene of southern France will appear in the first issue of the *Bulletin du Musée des Dinosaures*. She is also busy with the very abundant turtle material from Cruzy, and is describing a new pleurodiran from the Upper Cretaceous of southern France with Gene Gaffney (New York). Haiyan has also obtained several beautifully preserved skulls from the Early Tertiary phosphates of Morocco, belonging to cryptodirans and pleurodirans. Several new taxa are apparently present and will be described in the near future. Her work on Jurassic turtles from Thailand is also going on. (Jean Le Loeuff and Eric Buffetaut)

## THE NETHERLANDS

### Natural History Museum Rotterdam

It has been quite a while since our activities were mentioned in the *SVP News Bulletin*. Our staff has since been struck by the untimely death of Niek Kerkhoff in November 1994. He will be remembered for his lasting contribution to Dutch VP. At present, our VP staff consists of Jelle W. F. Reumer (museum director), Francien Braber (honorary curator of fossil large mammals), and Paul Y. Sondaar (honorary scientist); our honorary curator of mammals, Erwin J. O. Kompanje, specializes in cetaceans and sometimes also touches the fossil realm.

We are mainly active in the field of Quaternary paleontology of the Netherlands and the North Sea Basin, and Jelle Reumer still remains active working on European Soricidae (Insectivora). Papers about Insectivora came out dealing with such diverse localities as Frechen (Ruscinian, Germany), Crete (Pleistocene, Greece), and Maramena (Latest Turolian, Greece), and on the paleoecology of Soricidae. In cooperation with John de Vos (Leiden) and Dick Mol (Hoofddorp) we had papers published on the Early Pleistocene Dutch Oosterschelde fauna, the deer from the Oosterschelde, and the first find of *Bubalus murrensis* from the Netherlands. Papers are in print on the Insectivora from Calta (Ruscinian, Turkey) and the Pleistocene Crocidura from Crete, Greece. Paul Sondaar continued his fieldwork in Indonesia together with John de Vos and Indonesian counterparts. Last year we acquired the skeleton of a Miocene Mysticete whale from Liessel (The Netherlands) that is now waiting to be described.

Our major project for the year to come is the organization of the Second International Mammoth Conference that will take place in Rotterdam May 16B20, 1999. Information can be obtained through mammoth@nmr.nl. We will publish the Proceedings of the First Mammoth Conference that took place in St. Petersburg in 1995 in the Museum s journal *Deinsea* later this year. The Proceedings of the Second IMC will also be published in *Deinsea*. Please contact us for further information on our activities at reumer@nmr.nl. (Jelle Reumer)

### Small Mammal Group, Institute of Earth Sciences, Utrecht University

Although formally retired, Hans de Bruijn is more active than ever. Firstly, he participates in the Ptolemais multidisciplinary project funded by the Dutch Science Foundation (NWO) and supported by the University of Athens. Hans discovered various new small mammal localities in the Lower Pliocene lignite mines in the Ptolemais Basin (northwestern Greece). The combination of magnetostratigraphy, cyclostratigraphy, and Ar/Ar dating has resulted in a resolution of 20,000 years (the duration of a precession cycle) for the mammal faunas. It is now known where in the mammal zonation the Mio/Pliocene boundary is situated.

Secondly, Hans is working in Anatolia for many years now together with Engin Ünay and Gerçek Saraç from the MTA. The knowledge of small mammals from Anatolia has increased enormously since they started, and most MN mammal zones are now covered by one or more small mammal localities. The coming field season a larger crew, including Albert van der Meulen, Jan van Dam, Wilma Wessels, Wout Krijgsman, and Charon Duermeijer will join Hans to sample more new localities and do magnetostratigraphy.

During November 1997, Hans and Albert spent three weeks in Libya together with Remmert Daams, Pablo Pelaez Campomanes, and Dolores Soria from Madrid, Oldrich Fejfar from Prague, and Helmut Mayr from Munich. In a project, which was carried out together with the University of Bengazi and which was supported by the Sirte and AGOCO Oil Companies, the classic area of Jebel Zelten was prospected for small and large mammals. During previous campaigns no proper attention was paid to the stratigraphic position of the middle Miocene fossils. The 1997 prospection was successful and has yielded various new localities. Contrary to the expectations beforehand, the small mammal remains appeared to be concentrated in the relatively coarse sandy deposits.

Albert van der Meulens work mainly focuses on Spanish material. The fieldwork in the Aragonian type area in the CalatayudBDaroca Basin almost has come to an end now. Many years of intensive sampling together with the colleagues from Madrid (notably Remmert, Pablo, and Marian Alvarez Sierra) has resulted in a long, exceptionally dense, almost continuous EarlyBMiddle Miocene small mammal record, which recently has been correlated to the Geomagnetic Polarity Time Scale in the context of Wout Krijgsmans (Utrecht) thesis. An updated chronology including the age of a number of important zone boundaries is submitted to *Earth and Planetary Science Letters*. The coming years, both the earlyBmiddle and late Miocene records of the CalatayudBDaroca and Teruel basins will be further analyzed paleoecologically, although quite some taxonomic work remains to be done. The coming fieldwork season Albert and Jan van Dam will continue to sample the upper Miocene of the neighboring Teruel Basin.

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December 1997, Jan van Dam finished his Ph.D. on the paleobiology and paleoclimatology of the upper Miocene small-mammal record from the Teruel basin. It was very much appreciated that Pierre Mein from Lyon and Remmert Daams from Madrid were willing to come over and to be members of the jury. In one of his chapters, written together with Gert Jan Weltje, and submitted to *Palaeo3*, Jan used relative abundances of rodent teeth to construct detailed climatic curves for the late Miocene, which then were compared to various marine paleoclimatic records. The magnetostratigraphic frame was the result of the work of Wout Krijgsman and Miguel Garcés (Barcelona). Jans thesis contains a chapter on landmark-based morphometrics of murid teeth, which was published in the NATO ASI series as AAdvances in Morphometrics@edited by Leslie Marcus and others. Another separate paper on late Eocene glirids of northern Spain has appeared in a monograph edited by Nieves López Martínez and others published by the University of Lerida.

Jan just started a three-year postdoc and his aim will be to explore further the extinction and recovery events which took place in the Mediterranean during the early late Miocene (the so-called AVallesian crisis@). Fieldwork is planned for the summer both in Spain and Anatolia.

Wilma Wessels has again taken up her work on the small mammals from Pakistan. This has resulted in a paper on Myocricetodontinae (published in the *Proc. Ned. Akad. Wetensch.*) and a submitted paper on Gerbillinae. At the moment she is working on Pakistan Cricetinae.

Lars van den Hoek Ostende is finishing his thesis on Insectivora from Anatolia, and hopes to defend his thesis within the year. Four articles on these insectivores have already been published and two more are expected to follow shortly. Lars is now employed at the educational department of the National Museum of Natural History (ANaturalis@) at Leiden. In his spare time he still continues his work on fossil insectivores. After finishing his thesis on the Anatolian insectivores, Lars will continue his work on the insectivores from the CalatayudBDaroca Basin in Spain.

Recently, Ioanna Sylvestrou and Katerina Vassiliadou from Thessaloniki have studied Pleistocene small mammals from Greece at our Institute in the context of the Socrates student exchange program. Mary Dawson from Pittsburgh, Qiu Zhuding from Beijing, Constantin Dukas and Kostas Theocharopoulos from Athens, and Daniela Kalthoff and Thomas Mörs from Bonn visited our institute during working visits. (Jan van Dam)

## POLAND

#### Institute of Paleobiology, Polish Academy of Sciences, Warsaw

We are saddened to report that our colleague Andrzej Sulimski passed away last year. His memory is honored in an obituary which appeared in the fourth issue of *Acta Palaeontologica Polonica* 42.

Magdalena Borsuk-Biazynicka, following a hectic semester of teaching duties at Warsaw University, has returned to her studies of Triassic tetrapods within the framework of a joint project with Susan Evans and Elisabeth Cook (University College London) and Teresa Marya<sup>1</sup>/2 ka (Museum of the Earth, Polish Academy of Sciences). This project is supported by a BritishBPolish Joint Research Program between the British Council and the Polish State Committee for Scientific Research. Susan visited us last year. During her two weeks=stay she and Magdalena studied bony material recently prepared from matrix collected in Czatkowice,

and discussed related taxonomic and taphonomic problems. A short trip to Cracow also proved both pleasant and useful. Mariusz Paszkowski (Institute of Geological Sciences, Polish Academy of Sciences) kindly acted as guide at the Dzatkowice quarry, and discussed geological issues related to the locality with them. A few months later (in December) Magdalena spent two weeks at University College London, during which time a set of SEM photographs of uncoated specimens was taken. Two papers resulting from the project are almost ready for submission, and some others are in preparation. In November 1997, Aleksandra Bakuxa joined our laboratory staff, which has greatly enhanced preparatory work on the Czatkowice bone breccia.

Zofia Kielan-Jaworowska has continued her studies of the postcrania of multituberculates, providing new evidence for a sprawling stance in these mammals (published in *Acta Palaeontologica Polonica* 43, number 1). She has also worked on early Cretaceous triconodonts from Mongolia (joint project with Demberelyin Dashzeveg of the Geological Institute, Mongolian Academy of Sciences). Her paper with David Archibald and the late Lev Nessov on late Cretaceous ungulate-like mammals from Uzbekistan, with a phylogenetic analysis of Ungulatomorpha, has recently appeared in **Bulletin of** *Carnegie Museum of Natural History* no 34 (see Publications section in this issue). During 1997 Zofia made two visits to Norway in relation to the examinations of her students at the University of Oslo, and the public defense of the Ph.D. dissertation of her student Jørn Hurum entitled ACranial structure and relationships of Mongolian late Cretaceous mammals.@ Zofia has also been busy as the editor of *Acta Palaeontologica Polonica*, and this activity has taken up a lot of her time.

Halszka Osmólska reports that she and Teresa Marya<sup>1</sup>/ska (Museum of the Earth, Polish Academy of Sciences) have continued their work on oviraptorids (with a grant from The Dinosaur Society). They have recently published a description of the quadrate in Oviraptoridae (*Acta Palaeontologica Polonica* 42, number 3), comparing it with those of birds and non-avian theropods. They hope to finish a manuscript on oviraptorid relationships this year. Along with Rinchen Barsbold (Geological Institute, Mongolian Academy of Sciences) they also prepared a draft of a taxonomic paper on the Mongolian Oviraptoridae. In addition, Halszka and Rinchen are determined to submit a manuscript on *Velociraptor mongoliensis* this year.

Karol Sabath, besides his duties as an assistant editor of the *Acta Palaeontologica Polonica*, has mainly been engaged in the popularization of vertebrate paleontology. He coordinated the Institutes participation in the Warsaw Science Festival in September 1997, and this included temporary exhibitions on the dinosaurs appearing in AJurassic Park: The Lost World@and on dinosaurs on stamps, as well as several quizzes for kids at our Museum of Evolution, and a number of lectures on the dinosaurBbird link and the evolution of flight. Since March 1998 there has been an exhibition on the ADinosaur Renaissance@at the Natural History Museum in Kazimierz Dolny, close to the locality from which alleged sauropod remains were described under the name *Succinodon putzeri* by Friedrich von Huene in 1941 (later proved to be a piece of fossilized wood with the siphonal tubes of wood-boring bivalves). Karol is the author of the scenario of the exhibition, and also illustrated it with a selection of his paleoart paintings and drawings.

Mieczys aw Wolsan has been working on too many projects at once (as usual). The majority of these have involved carnivoran paleontology and have been related to musteloid phylogeny, evolution, systematics, and

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paleobiogeography. Mieczys aw was extremely lucky last year to have been awarded several new grants for projects pertaining to his musteloid studies. Grants from the American Museum of Natural History (Theodore Roosevelt Memorial Fund and Department of Vertebrate Paleontology), the Field Museum (Robert O. Bass Visiting Scientist Fund), and the Paleontological Society (International Research Program) enabled him to revisit the United States for three months last fall, studying fossil and Recent carnivoran collections housed in the Field Museum, Chicago; the University of Michigan Museum of Paleontology, Ann Arbor; the American Museum of Natural History, New York; the National Museum of Natural History, Washington, D.C.; and the Peabody Museum of Natural History, New Haven. While in Chicago he attended the SVPs annual meeting and presented a talk on the oldest known procyonids. Mieczys aw gratefully thanks all those who made all these trips so pleasant and successful, especially Jessica Anderson, Tomasz Baumiller, Bob Emry, John Flynn, Irina Koretsky, Dick Tedford, Xiaoming Wang, and Elaine Zeiger. During his stay in the United States, Mieczys aw also managed a short trip to France to give an invited paper entitled AGlobal climatic cooling in the mid-Cenozoic and a revolution in the middle-ear organization of carnivoran mammals@at the conference Ecologia Europaea: Environmental European Forum of Young Researchers held on October 2B6 at Le Bischenberg. The Académie des Sciences and the Groupe Générale des Eaux generously covered all expenses related to this trip. Thanks to two other 1997 awards (from the Stefan Batory Foundation and the Dehnel-Petrusewicz Memorial Fund) Mieczys aw also attended the Seventh International Theriological Congress in Acapulco, Mexico (September 6B11), where he gave an invited talk at the workshop Ævolution of the Procyonidae.@Moreover, last summer he spent a successful month investigating the fossil musteloid collections in the Institute of Vertebrate Paleontology and Paleoanthropology, Chinese Academy of Sciences (thank you Qi Guoqin and Qiu Zhanxiang for your generous hospitality). The trip was sponsored by the State Committee for Scientific Research and the exchange program between the Polish and Chinese Academies of Sciences.

Most of the winter Mieczysaw was busy working on the book Ævolution of Shrews@(co-edited with Jan Wójcik of the Mammal Research Institute, Polish Academy of Sciences). In addition to the editorial work, he and Jan did virtually all the publishers work prior to printing (electronic typesetting, computer graphics, layout, cover design, final page proofs, etc.) to reduce production expenses. The three weeks directly preceding the submission of the volume to the printer (spent in Biaaowieća at the Mammal Research Institute) were incredibly hectic, and Jan and Mieczysaw are extremely happy that the work is over. The book should have appeared by the time you read this. If you are interested in further information, look for details on the Web page http://bison.zbs.bialowieza.pl/evol.htm.

Mieczys aw has five students preparing their master s or doctoral theses, which, together with his teaching duties at Warsaw University, has kept him pretty busy. Jolanta Noskiewicz submitted her M.Sc. thesis entitled ALate Pleistocene leporids of Poland@in April, and will have defended it at Warsaw University by the time this note appears. <sup>o</sup> ucja Fostowicz-Zahorska is hard at work on her master s project on the systematics and evolution of the PlioBPleistocene leporid *Hypolagus beremendensis*. She is aiming to complete the manuscript before the end of June to defend it at Warsaw University later this summer. Elwira Szuma (affiliated with the

Mammal Research Institute, Polish Academy of Sciences) is well on her way to completion of her Ph.D. thesis entitled ADental variation in the Polish population of the red fox: Ontogenetic and evolutionary implications.@She has just started writing the first draft of the manuscript, and hopes to submit the final version during this fall. Mieczys\*aw\* other Ph.D. student, Grzegorz Lipecki (affiliated with the Institute of Systematics and Evolution of Animals, Polish Academy of Sciences), and his M.Sc. student, Tomasz Singer (Warsaw University), are both in the early stages of their research.

Another Warsaw University student, Tomasz Sulej, is completing his masters work on the skulls of late Triassic metoposaurids from Krasiejów, southern Poland, under the direction of Jerzy Dzik (Institutes Department of Systematic and Evolutionary Paleontology). Tomasz is aiming at a defense this summer.

Recent visitors to our Department of Vertebrate Paleontology have included: Alain Blieck (Université des Sciences et Technologies de Lille), who studied collections of Silurian and Devonian agnathans from Polish boreholes; Susan Evans (University College London), cooperating with Magdalena; Tomasz Jerzykiewicz (Geological Survey of Canada), discussing with Zofia and Halszka questions relating to the deposition of Cretaceous sandstones in the Gobi Desert; Maureen Kearney (George Washington University), investigating late Cretaceous amphisbaeian material from Mongolia; Zhexi Luo (Carnegie Museum of Natural History), working on our Mongolian collections of Cretaceous mammals; Matthew Nitecki (Field Museum), discussing with Zofia, Karol, and the other assistant editor (Marcin Machalski of the Institutes Department of Biogeology) issues related to editing of *Acta Palaeontologica Polonica*; Thomas Rich (National Museum of Victoria), discussing with Zofia the systematic position of a purported placental from the Cretaceous of Australia; Scott Sampson (State University of New York) and Larry Witmer (Ohio University), both studying dinosaur skulls from Mongolia; and Marina Sotnikova (Geological Institute, Russian Academy of Sciences), investigating collections of PlioBPleistocene carnivorans from Poland, and working with Mieczys<sup>x</sup>aw on mustelid material from the Siberian Pliocene locality Udunga.

We welcome all to visit our new Web pages. The address of the site is http://www.paleo.pan.pl. (Mieczys/aw Wolsan)

## ROMANIA

#### University of Bucharest

Last summer Dan Grigorescu and Zoli Csiki from the University of Bucharest together with a large team of volunteer/students searched for three weeks in two main regions of the Hateg BasinC the Sibi@l valley near Sânpetru village (type area of the Sânpetru Formation) and Tustea (the nesting site with *Telmatosaurus transsylvanicus* eggs and baby bones). In Tustea we continued to remove tons of red mudstones left last year by the bulldozer which leveled a large platform for further searching. From the nesting horizon or close to it a large number of bones was recovered including what seems to represent associated remains of a small theropod forelimb. The theropods, hadrosaurids, *Rhabdodon*, and chelonians are the best represented groups in Tustea. Several microvertebrate fossiliferous sites, including Tustea and some others newly discovered from the same Densu@Cuila Formation were searched by screenwashing of fine-grained sediments. They

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already yielded a large and diverse microvertebrate assemblage including fishes, frogs, salamanders, lizards, crocodilians, dinosaurs (teeth), and multituberculates (very interesting isolated molars, different from those already mentioned from Hateg). A paper on the Upper Maastrichtian microvertebrates from the Hateg Basin made by D. Grigorescu, M. Wenczel, Z. Csiki, and R. Limberea will be presented during the Third European Workshop on Vertebrate Paleontology in Maastricht, 6B9 May 1998.

Two other papers were presented last year in QuillanBEsperaza (France) during the Second EWVP: AThe incubation environment of the *Telamatosaurus transsylvanicus* eggs in the Upper Maastrichtian of the Hateg Basin@(D. Grigorescu) and ASmall theropods from the Late Cretaceous of the Hateg BasinC An unexpected diversity at the top of the food chain@(Z. Csiki and D. Grigorescu). Two new fossiliferous sites were discovered close to the top outcrops of the Sânpetru Formation in the Sibi@l valley. Ongoing magneto-stratigraphic research seeks to establish a local scale for the two Upper Maastrichtian formations and to identify the K/T boundary in the Hateg Basin.

Costin R |dulescu and Petru Samson from the Institute of Spaeology Æmil Racovi $\hat{U}$ ,@Bucharest, continue the work on three subjects: 1. the PlioceneBPleistocene mammals from the Dacian Basin (part of the Central Paratethys); 2. the Pleistocene micromammals in several caves from Dobogea and Oltenia in southern Romania; 3. the Maastrichtian multituberculates from the Hateg Basin (the genera *Barbatodon* and *Kogaionon*). Regarding the mammals from the Dacian Basin, they noticed an interesting phenomenon of anagenesis that led in a span of 1 my (based on paleomagnetic data) to the genus *Dolomys* (related to *Ondatra* from America) starting from primitive forms with a dental morphology of *AMimomys*@type (Cochiti event).

Erika Tallodi-PosmoÕanu from the Museum ATarii CriÕarilor@in Oradea had successfully passed the last pre-Ph.D. exams and now she has more time to devote to her thesis on the ornithopods from the Lower Cretaceous bauxitic deposits in western Carpathian. In the same museum, Marton Wenczel continues the study of the Pleistocene herpetofauna from Betfia, near Oradea. He is also involved in studying the Upper Maastrichtian amphibians and lizard from the Hateg Basin.

Recently, Rodica Ciobanu from the Museum of Sibiu submitted her Ph.D. thesis on the Paleogene sharks from Romania. (Dan Grigorescu)

#### RUSSIA

## Zoological Institute, Russian Academyu of Sciences, St. Petersburg

Alexander Averianov and Igor Danilov participated in AugustBSeptember 1997 in the International Expedition to the Kyzyl Kum Desert, Uzbekistan, and worked there together with J. David Archibald, Hans-Dieter Sues, David Ward, and Christopher King on Cretaceous outcrops. As usual, many vertebrates including some mammals were found. In September Alexander Averianov together with Joerg Erfurt spent some days in Bishkek (Kirghizia), preparing an international project to study Eocene mammals in the Issyk-Kul=Lake area (Tian-Shan Mountains). Following this activity, Alexander spent three months at the Museum National dHistoire Naturelle, Paris, studying collections of fossil and Recent lagomorphs and enjoying the hospitality of French colleagues and the beauty of Paris. He extends many thanks to Marc Godinot, Vera Eisenmann, France de Lapparent de Broin, Denise Sigogneau-Russell, Donald Russell, Bernard Battail, Brigitte Senut, Martin Pickford, Christian de Muizon, Emmanuel Gheerbrant, and other colleagues. Now Alexander is trying to finish a monograph on fossil and Recent Lagomorpha and the editing of a memorial volume in tribute to Lev Nessov, containing some previously unpublished papers of Nessov and his colleagues. In 1997 Alexander and Lena Golovneva published a second monograph of Nessov <del>s</del>, ANonmarine Cretaceous vertebrates of northern Eurasia@(in Russian, 218 pp., 60 photographic plates, 180 FRF, available on request from A. Averianov, e-mail: sasha@AA1923.spb.edu).

Andrei Panteleyev described the Middle and Upper Pleistocene bird remains from Denisova Cave in the Altai. The avian assemblage of 757 bones represents 59 species. The remains of *Lagopus lagopus*, *Eremophila alpestris, Plectrophenax nivalis, Leucosticte arctoa*, and *Pyrrhocorax pyrrhocorax* are predominant. By the Middle Pleistocene 28 Recent species already inhabited the Altai. He also studied the Upper Pleistocene vertebrate fauna from Tsagan-Agui Cave in the Gobi Altai (Mongolia). The Tsagan-Agui assemblage includes 17 species of birds (*Falco cherrug, Columba rupestris, Syrrhaptes paradoxus, Eremophila alpesrtis, Petronia petronia*, and others). A complete tarsometatarsus of an owl (Protostrigidae)

from the Upper Eocene of the Crimea is described as *Aurorornis taurica* gen. et sp. nov. It is the first complete tarsometatarsus for the family Protostrigidae. A collection of bird remains from the Upper Cretaceous locality of Dzhyrakuduk (central Kyzyl Kum) is currently being studied. Bones of the enantiornithine predominate. Four new species and four new genera (including six species) have been described on the basis of the coracoid bones.

Alexei Tikhonov was involved in a joint project with Sergei Vartanyan for the study of Pleistocene and Holocene fauna of Wrangel Island, Chukotka, Siberia. He prepared and published a multimedia encyclopedia AMammoths@in Russian. Together with Dr. Naoki Suzuki, Alexei traveled to the Bykovsky Peninsula (the delta of the Lena River) to the place of discovery of the Adams mammoth (found in 1799, collected in 1806B08).

Irina Kuzmina has published the monograph AHorses of North Eurasia from the Pliocene to the present time@(*Proceedings of the Zoological Institute*, 1997, volume 173, 224 pp., in Russian).

Gennady Baryshnikov in 1996 and 1997 continued his field research in the Middle Paleolithic sites in the Altai Mountains and carried out the sketches of 27 species of large mammals for an multidisciplinary monograph on the Denisova Cave and the Ust-Karakol open site. He also described the mammalian fauna of the Upper Paleolithic site of Tsagan-Agui Cave in the Gobi Altai, Mongolia. Gennady prepared papers on *Ursus arctos* from the Pleistocene of Yakutia, Siberia (with Gennady Boyeskorov) and on *Dinofelis* from the Moldova Republic (with Alexander Averianov). He also has been the editor of a recent issue of the *Proceedings of the Zoological Institute* (1996, volume 270, 206 pp., in Russian), where he published a review of the Pleistocene Hyaenidae of Russia (with Nikolai Vereshchagin) and the description of deciduous teeth of fossil and Recent Viverridae and Herpestidae (with Alexander Averianov). In May 1996 Gennady was a guest of the Illinois State Museum in Springfield and also visited the Field Museum of Natural History in Chicago. In the fall of 1997 he studied the collection in the Natural History Museum in London, by invitation of the Royal Society. He extends many thanks to Jeffrey Saunders and Bonnie Styles (Springfield), John Flynn (Chicago), Paula Jenkins, Andrew Currant, and Adrian Lister (London). (Gennady Baryshnikov).

## **UNITED KINGDOM**

#### Queen Mary & Westfield College

Since late October of last year David Polly has been the only vertebrate paleontologist at Queen Mary & Westfield College of the University of LondonC in fact, probably the only vertebrate paleontologist in the East End. He remains a research associate in the Department of Palaeontology at The Natural History Museum, where he can be found on Friday afternoons and other random times. David and Jerry Hooker took a short trip to Mongolia thanks to funding by The Royal Society and The Natural History Museum (and thanks to the generosity of Mike Novacek and the AMNH for rental of their field vehicles, for which D. Dashzeveg did not acquire advance permission unbeknownst to us). Visits to several classic Paleocene and Eocene localities turned up a few specimens that may be important for Jerry and Dashzeveg-s collaborative work.

David has been catching up with all the writing that languished during his employment by the NHM. He

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has recently finished manuscripts on the coefficient of variation, on developmental constraints and the selection in tooth evolution, on two Cretaceous lizards from Kazakhstan (with Elena Kordikova, Vladimir Alifanov, and Gregg Gunnell). He also finished several small articles for the Encyclopedia of Paleontology and saw his monograph on viverravids and stratocladistics published. His next projects will be on E. D. Cope and classification, viverravid basicrania (with Ron Heinrich), and on the role of developmental units in the evolution of cainothere jaws.

David has spent a lot of time working on *Palaeontologia Electronica*, the first electronic journal devoted to paleontology. Volume 1, Issue 1 was successfully published in February and had a Acirculation@of more than 1,000 readers in the first month alone! The editors would, of course, like to see more vertebrate papers in the journal (hint, hint). The journal is peer reviewed and each issue is available free of charge on the WWW for a year. After that, the journal sponsors will have redistribution rights. We hope that copies will be shipped on CD-ROM along with the print journals published by the sponsors. Advantages to publication in PE are that there is no page limit, illustration can be lavish (color, 3-D, animation, etc.), and the turn-around time between submission and publication can be extremely short (less than three months so far). Have a look at http://www-odp.tamu.edu/paleo/.

Otherwise, the time is whiled away by teaching anatomy to the future doctors of the UK National Health Service, applying for grants, serving on Ph.D. committees, attending meetings, and drinking that tasty British beer that Rich Cifelli likes so much.... (David Polly)

## UNITED STATES OF AMERICA

#### **Northeast Region**

#### Brown University and University of Rhode Island

News is a little sparse this month, as both Dave Fastovsky (URI) and Steve Gatesy (Brown) have been (indirectly) giving birth (both have new daughters) and have been rather otherwise occupied.

Dave has three new graduate studentsC Alisa Herrick, Matt Jones, and François Therrien. They will be working this summer in the Chinle Formation in the Petrified Forest, researching various aspects of vertebrate paleoecology. There has been considerable interaction between these students and the Brown VPers, as they have been attending Christine Janiss comparative anatomy course (including a seminar based on the course with additional participation from Kevin Middleton and Jessica Theodor), and have also been regular attendees at GRIPS (Greater Rhode Island Paleontological Society).

Kevin Middleton (Brown) has been a teaching assistant in the aforementioned comparative anatomy class, and claims that he is currently lost in ternary morphospace. Kevin and Steve will be going to Greenland this summer on the expedition sponsored jointly by Harvard University and the University of Copenhagen.

Jessica Theodor is reaching the end of her first year as an Anatomy Postdoctoral Teaching Fellow at Brown, and has been busy trying to excavate down to her desk by finishing up some manuscripts. The description of a new species of *Protoreodon* from the Uintan of San Diego has finally been submitted for publication. Jessica, Christine Janis, and Lodi Broekhuizen (a Brown undergraduate) have been examining

Cenozoic ungulate diversity patterns, and will present the results at SVP.

Christine Janis has completed her rewritten chapters for the fifth edition of Vertebrate Life (major editor Harvey Pough), and the wretched Ævolution of Tertiary Mammals of North America@will actually be published by the time you read this (publication date May 18). Christine has been working in collaboration with Mikael Fortelius and Suvi Viranta (University of Helsinki) to compile the Neogene portion of the Tertiary Mammal volume into a faunal database. Jessica and Christine plan to continue this work and include the Paleogene localities this summer (some Brown funding will enable them to hire undergraduate slave labor). Christine and Jessica will both be attending two meetings this summer that relate to their collaboration on this database project: The Penrose Conference on ALinking Spatial and Temporal Scales in Paleoecology and Ecology@in May, and a NCEAS workshop organized by John Damuth on AClimatic and Habitat Inference from Features of Mammalian Communities.@

GRIPS continues to thrive on an approximately monthly basis. As well as the previously mentioned participants, we also enjoy participation from Craig Wood (Providence College) and Steve DHondt (URI Oceanography), plus various sundry undergraduates and/or postdocs from all three Rhode Island institutions. (Christine Janis)

## **Providence** College

C. B. Wood had the pleasure of joining colleagues for another January (1998) adventure in the Mesozoic of Ethiopia. The trip was sponsored by a film-making enterprise under the able direction of Jaime Hellman (Sedwick Films/Tapestry International) with soundman/Mel Gibson look-alike Stacey Hill. Mark Goodwin (UCMP) was leader, joined by Howard Hutchison (UCMP) and Charles Schaff (MCZ). A majority of the time was spent collecting from the Tigray Province localities that last year yielded an interesting (new) Late TriassicBEarly Jurassic temnospondyl amphibian (manuscript already submitted, Anne Warren as first author). It was also possible to revisit the Shoa Province, Blue Nile localities which yielded yet another Late JurassicBEarly Cretaceous theropod tooth (way to go, Chuck!). Many thanks to everyone who made this a great trip.

Wood has just submitted a manuscript on latest studies of nontherian tooth enamel microstructure, with the hope that enamel characters will once again be back in the game, as a helpful small part among all the other character sets in the on-going Awar of the cladograms.@Co-authors are E. R. Dumont and A. W. Crompton. (Craig Wood)

#### Smithsonian Institution

Things have been moving right along here. The Department of Paleobiology sent a large group up to Dinofest in Philadelphia recently and everyone enjoyed the show. A number of others attended the symposium and presented papers the next week. Richard Benson is the new chair of the Department. Ralph Chapman has been busy with a variety of topics including digitizing and computer modeling of vertebrate fossils. He presented a paper on that subject at Dinofest and is one of the organizers of a symposium on that very topic at the annual

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meeting in Utah. Discussions he has had with various members show they are doing some exciting things in this area and the symposium should be an enjoyable one. The summer will see a large amount of time spent CT scanning a series of specimens and trying to develop contacts to allow more prototyping (obtaining a hard copy of the computer model). Additional work in VP includes more taphonomic and paleoecological studies with Kay Behrensmeyer, developing approaches to analyzing function in dinosaurs using computer models, and, of course, lots of morphometric applications.

Fred Grady recently has finished collecting in Helix cave, West Virginia, which initially produced teeth of *Bootherium*, *Platygonus*, and *Equus*. Screening of matrix from this site produced a good sample of small vertebrates that appear to be Rancholabrean in age. More recently he checked out another cave in West Virginia which had produced a few peccary teeth previously, and was fortunate to locate an articulated skeleton of *Platygonus vetus*, the front half of which was recovered. The remainder hopefully will be recovered soon. A caving partner, Dave Hubbard, has been forwarding some interesting discoveries to him from caves in the southwestern part of Virginia, including a tibia and fibula of *Arctodus simus*, and teeth of *Tapirus* from two different sites. Dave has also rediscovered a site in Early-s Cave where Cope collected in 1867.

Pete Kroehler will be traveling to the Slovak Republic with Bob Emry and Irena Koretsky in late June and July to collect Miocene mammals there. The locality is near Bratislava. The work on the Kazak brontotheres is progressing quite well as Fred Grady has begun by working on two jackets, the lower jaws, and the scapula. Steve Jabo has nearly finished the skull of the Kazak tapiroid that he is preparing along with the skull of the exhibit lab brontothere. The VP lab made molds of a couple hundred rabbit teeth from Kazakhstan and molds of several larger mammals as well that are due to be returned to their motherland.

Kevin de Queiroz has finished his paper (with Ling-ru Chu and Jonathan Losos) on a second fossil anole in amber from the Dominican Republic. Its from the Early to Middle Miocene and is indistinguishable from two of the extant species.

Mike Brett-Surman has co-authored another dinosaur book, this time with Thomas Holtz (University of Maryland). It is based on the U.S. Post Office dinosaur stamps painted by artist Jim Gurney. The book is aimed at families and stamp collectors. Mikes first book, as junior editor with Jim Farlow (The Complete Dinosaur), has gone to a third printing, with positive reviews in the popular and technical press. Mike is also gearing up for his Wyoming field season in the Big Horn Basin, as part of a multidisciplinary team including Steve Jabo from the Vertebrate Paleontology Lab. They will be studying a track site from the Middle Jurassic Sundance Formation and also an eggshell site, plus multiple bone sites ranging up to the Aptian. A side trip to Montana to look at a new Cretaceous site is also planned. (Mike hopes this will be the first season in his career where he will **not** find another sauropod.) (Ralph Chapman)

## **Southeast Region**

## Florida Museum of Natural History, University of Florida

Plans are underway for Paleofest98, the second biennial celebration of Florida paleontology, which will be held 20B21 November at the Florida Museum s new exhibition and education facility at Powell Hall. FLMNH and the Florida Paleontological Society are cosponsoring the event. Highlights include a lecture by Jack Horner (Museum of the Rockies), a variety of field trips and workshops, and a banquet and fundraising auction.

Collection manager Marc Frank spent a week in April participating on the Mulegé Education and Research Program in Baja California Sur, Mexico. This phase of the program, which was conceived and directed by Susan Arter of the San Diego Natural History Museum, incorporated specimen conservation and documentation, exhibit reorganization and enhancement, development of a student docent program, and bilingual natural history education with community members. The hub of these activities was the Mulegé Regional Museum, a nonprofit community museum containing several thousand objects reflecting the unique natural, cultural, and historical resources of the region.

Russ McCarty just finished restoring a partial skull of a seacow recently found in the Four Corners Mine in Manatee County, Florida. This specimen, which dates from the late Miocene (Hemphilian), has a skull only about a foot in length. The small size and a few other unique features indicate this specimen may be another example of the undescribed seacow that Darryl Domning is now in the process of describing. We+l know more when Darryl has had a chance to look at our new find.

Barry Albright was recently awarded a scientific research grant from the National Geographic Society for magnetic stratigraphy work in the John Day Valley of Oregon. Collaborators on this project include Ted Fremd, Bruce MacFadden, Carl Swisher, and Michael Woodburne.

Dennis Ruez is finishing his master s thesis and moving on to the University of Texas in Austin in August. He will be a Ph.D. student in the Department of Geology studying under Chris Bell. As Dennis is a hard worker (and an all-around nice guy), we are certain that he will thrive in his new environment. No matter what time of day or night you went into the VP collections here at the Museum, you would not be surprised to find Dennis there, hard at work, but willing to laugh at a little gratuitous griping from a fellow student. He will be missed.

Bob Feranec, a master-s student working with Bruce MacFadden, is presently very content cutting out and crushing pieces of tooth enamel for isotopic analysis from various paleoungulates. Bob intends to use stable carbon isotopic data to address the evolution of the hypergrazing niche in North America due to *Bison* dispersal into the New World. The study concentrates on grazing paleoguild herbivores from early Pleistocene and late Pleistocene sites.

Dave Webbs team of SCUBA excavators returned in May and June to the Aucilla River to continue excavating the mastodon butchery site at Sloth Hole and the 30,000 year-old mastodon-rich site at Latvis-Simpson. Andy Hemmings is field scientist for the former and has his eye peeled for worked ivory and bone fish hooks: whereas Matt Mihlbachler, who heads up work on the older site, is especially concerned with

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mastodon digesta and microfauna. Dave is also pleased to report that after 30 years of reposing on a dark shelf, the magnificent Aucilla mammoth will soon stand tall in the central gallery of the new Powell Hall of Education and Exhibition.

Our mammoth arrived safely in East Coulee, Alberta, Canada, where it will be articulated and shipped back to Florida in modular units. Since it is so complete and a fairly large specimen, P.A.S.T., the Canadian company doing the articulation, will mold and cast our mammoth and produce reproductions for sale. It will arrive back in Gainesville sometime in October, the same time that the Potomac Groups traveling exhibit AElephants!@will arrive for a venue at the Florida Museum of Natural History. The exhibit will show proboscidean evolution and folklore through mounted specimens and interactive exhibits. Mounted specimens will include a Nebraska shovel tusker, the Hebior wooly mammoth, a 3 ft-high dwarf, late Pleistocene elephant from Sicily, and a cast of ADima,@the baby mammoth preserved in the Siberian permafrost.

Dave Webb and Bruce MacFadden are very pleased to announce the Lucy Dickinson Graduate Fellowship in Vertebrate Paleontology, to be offered in January 1999 to an incoming student at UF. Please see the announcement in this issue. (Jay O-Sullivan)

#### Georgia Southern University

Sandra Madar of Hiram College (Ohio) visited us briefly this spring to study the functional anatomy of the vertebrae, ribs, and pelvis of our new protocetid whale. The formal taxonomic description of the AVogtle whale@is now set for the September issue of the *Journal of Paleontology*, and the GSU Museum plans to hold a special exhibit on whale evolution commemorating the event in October. A description of the mammals from the late Miocene Mauvilla local fauna of southern Alabama, a collaboration between Richard Hulbert and Frank Whitmore (USNM), was recently submitted to the *Journal of Vertebrate Paleontology*. Leann Hubiak, a graduate student in the Biology Department and new SVP member, has decided to work on the ichthyofauna of the early Miocene Porters Landing locality for her thesis project. (Richard Hulbert)

## LSU Museum of Natural Science

On May 12, Julia Sankey defended her Ph.D. dissertation titled ALate Cretaceous Vertebrate Paleontology, Paleoecology, and Magnetostratigraphy of the Upper Aguja Formation, Talley Mt. Area, Big Bend National Park, Texas.@Ray Wilhite attended Dinofest and especially enjoyed Ray Stanford-s talk about the baby sauropod tracks, the talk by J. Wilson and M. Carrano on sauropod trackways and biomechanics, and the opportunity to see examples of almost all the Chinese sauropods. He plans to begin dissecting alligator limbs soon, and would appreciate news of any publications on this topic which he might have missed, i.e., not the classics like Romer. He would be very interested to talk to anyone who has a complete forelimb or hindlimb of either *Camarasaurus*, *Diplodocus*, or *Apatosaurus*.

Jonathan Franzosa, a geology major at Louisiana State University, will be graduating in May with a B.S. in geology, and will be attending the University of Texas at Austin in the vertebrate paleontology Ph.D. program.

Work by Judith Schiebout and Suyin Ting on the Miocene of Fort Polk is continuing, and the following articles are published or in press: Schiebout, J. A. 1998. When elephants and rhinos roamed Louisiana: Hunting Miocene fossils on Fort Polk. *Phi Kappa Phi National Forum* Winter Edition, pp. 26B29. Schiebout, J. A. and S. Ting. 1998. Miocene terrestrial microvertebrates recovered from conglomerate rich in pedogenic nodules, Fleming Formation near Coldspring, Texas. *Texas Journal of Science*. 8 manuscript pages, 1 fig. (Judith Schiebout)

## **Midwest Region**

## Cincinnati Museum Center

New paleontology staff at CMC add to the largest department within the Collections and Research Division of the Museum. Dr. Paula Work joins us from the Nevada State Museum as Invertebrate Paleontology Collections Manager. In the next two years, she will initially concentrate on the transfer of the University of Cincinnati fossil collection, a world-class IP resource, to the Museum. Occasional duties involving VP loans and similar activities will also be handled by Paula during this time. Following the end of the IP grant from NSF and the collection transfer, Paula, a vertebrate paleontologist by training, will become Collection Manager for all CMC paleontology. Paula has just finished her dissertation in geology at the University of Iowa. Her title, ATaphonomy and paleoecology of the middle Holocene Lilienthal Fossil Biota, Cedar County, Iowa,@hides the fact that she has examined Pleistocene microvertebrate faunas in her study as well. This experience will be welcome as we proceed with our curation and analysis of the Sheridan Pit site near Findlay, Ohio. As an added bonus, Dr. David Work, an expert on Late Paleozoic ammonoids, joins us as Research Associate.

Next on the list is Derrick Kysar, our Assistant Collections Manager cum technician. Derrick comes on board from several years at the Smithsonian where he developed expertise in paleontological collection management and received formal training in conservation and large vertebrate storage and handling. Derrick will help us run our exhibit-floor preparation facility should we be successful in gaining budgetary approval this year. While not guaranteed, we are hopeful that this will come through and another lab will be up and running by the winter. Derrick has a masters in museum studies/collection management from George Washington. Derrick is an old Kansas boy with a geology degree from HaysC his family owns land out in the NiobraraC coincidentally, a field area of special interest to Glenn Storrs.

Speaking of Kansas, Glenn Storrs is gearing up to return to Kansas and work with Pete Bussen and Mike Everhart on a couple of plesiosaur localities. They will be joined by Nicholas Bailey, our VP intern. Nicholas has a geology degree from the University of Plymouth and will be in Cincinnati for 18 months learning paleontological/curation practices. Janet Bertog, late of the South Dakota School of Mines and currently doing a bentonite stratigraphy/chemistry Ph.D. with Warren Huff at UC, will also be part of the crew. Janet is a VP Research Assistant at CMC and will continue her studies of *Neotoma* while here.

In other news, Tamaki Sato has left us, having received her masters from UC for a review of Asian plesiosaurs and a study of a Japanese polycotylid. Much missed, Tamaki will begin her Ph.D. studies with

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Betsy Nicholls in the fall. Derek Parker continues his studies on Oligocene testudines and their significance as indicators of aridification. Glenn Storrs has been promoted to Associate Curator and, now that he is no longer serving on so many search committees, may get back down to some of his own work! (Glenn Storrs)

#### Fort Hays State University

Since our last report in June 1997, the following has transpired. We now have an approximate date for the opening of our new facility. The big day will be in March of 1999, barring any additional setbacks. Work by Sternberg staff, volunteers, and ADeaton@staff proceeds apace.

Joe Beamon is close to defending his thesis on the paleoenvironment and systematics of a clastic unit from the Kiowa shale. Joe is suggesting that the unit, about 4" thick, resulted from storm activity. He has a number of shark taxa, turtle, and other interesting reptile material that he has yet to get a handle on. Michelle David is also close to defending her thesis on the schmelzmuster of *Ptychodus*. Bill Garcia is working on a project involving a functional analysis of bird claws and considering looking at K-crocs for a thesis problem. Gabe Bever is looking at microtines from the Blonquist Rockshelter and may use them, as well as some of the other taxa from the site, as a thesis problem. Michelle Darnell is putting the finishing touches on her study of the Minium Quarry horses and Robbie Richards is looking at a *ACoelophysis*@specimen that E. C. Case collected. Trisha Kraus decided to continue her studies with us and will be doing a physical stratigraphic study of our Ogallala sites in northern Ellis and Trego counties. In addition to their academic work, Trisha and Joe have been employed in the Museum working on various aspects of the new exhibits. After many years in the *A*real world@Scott Moses has returned to complete his undergraduate degree and we are putting his considerable skills to use in the production of the exhibits.

Mike Everhart, Apaleontologist at large,@reports that he has been leading trips for various academic and amateur groups into the chalk. His research on shark predation of mosasaurs continues. He is looking forward to joining Glenn Storrs in the Pierre this summer.

Greg Liggett made a geological reconnaissance of the Comanche National Grasslands as part of a challenge grant with the Forest Service. The final report on the Cimarron National Grasslands has been submitted and a report on the work will be presented in Rapid City this fall.

Rick Zakrzewski spent a few days in the Meade area with Bob Martin and helped Francesca Smith of the University of Chicago collect samples for her study of Miocene/Pliocene phytoliths. Along with providing some input into the grassland studies, he is working on a manuscript involving *Paenemarmota* remains from Idaho. (Rick Zakrzewski)

## Museum of Geology, South Dakota School of Mines and Technology

The students (both graduate and undergraduate) are going to be very busy this summer, as our program is full. Many projects relating to students=theses plus running several projects for the National Park Service, Bureau of Reclamation and Corps of Engineers will keep most of us out of trouble!

In April, Dave Cicimurri successfully defended his thesis on elasmobranchs of the Cretaceous System of

the Black Hills Region. He is looking forward to assisting us with our many projects this summer without the thesis taking up so much of his time! Christian Maloney Cicimurri is working on her thesis this summer and will finish this fall. She is examining the Blancan vertebrates from the Ringold Formation of Washington. In addition, this summer she is the crew leader at the Pig Dig Quarry, which has been reopened much to delight of Badlands National Park visitors. Darrin Pagnac is also looking toward finishing his thesis on *Camarasaurus* speciation this fall. He recently submitted a paper, co-authored with Dan Chure, to *JVP* on rare sauropod elements from Dinosaur National Monument. Darrin and Joe DiBenedetto, another Tech graduate student, are presenting a paper on the taphonomy of the Little Houston Quarry in Sundance, Wyoming, this fall at the Fifth Conference of Fossil Resources. Joe is one of our graduate students with research interests going in many different directions. Adding to his taphonomic studies of a Jurassic dinosaur quarry in Wyoming, he is continuing his thesis research on the taphonomy of the Tyree Basin and Oligocene fauna during this summer as he works in Badlands National Park. This fossiliferous basin contains the second recorded Oligocene fossil tree stump within the Park and Joe will be presenting a poster about this rare find at the Fossil Conference this fall. And finally, Joe is working with Jim Martin in describing the microfauna from the Miocene Ellensburg Formation, Washington.

Jim Martin S Ph.D. student, Tom McConnell, continues his work on the early Arikareean NALMA and has submitted two papers for the Science and Research on Public Lands symposium during the Fifth Conference of Fossil Resources to be held in Rapid City, October 13B16, 1998. He is hoping for a lively exchange of ideas with participants during this conference. Barb Rowe, a new graduate student, is looking forward to the reopening of the Stone locality this summer as she has elected to study this quarry for her thesis. Kathy Stokosa is continuing her research on theropod teeth and hopes to be finished approximately one year from now. Toni Superchi will be very busy this summer as she assists Rachel Benton, Park Paleontologist at Badlands National Park, and works part time at the Flint Hill Quarry, which is also being reopened for her thesis work. Another graduate student, Jeff Person, will begin his research this fall on Miocene carnivores collected from one of Jim Martin dissertation sites in the state of Washington.

Recent graduate Heather Finlayson has been temporarily hired by the Museum to assist with fossil preparation, curation, grant writing, and fieldwork. She is also actively seeking permanent employment at other institutions. In addition, she will be presenting a paper based on her thesis work on the armored dinosaur *Edmontonia* at the 1998 SVP meetings in Utah. This past February, we wished Bruce Schumacher a fond farewell as he began his work for the Chicago Field Museum preparing the *Tyrannosaurus rex* that will be partially on display at Disneys Animal Kingdom in Orlando, Florida, over the next two years.

All of us are happy to have Jim Martin back from his exciting trip to Antarctica where he was a part of an NSF team, including Judd Case and Dan Chaney, that recovered the first hadrosaur from this continent. In addition to this find, many partial-to-complete skeletons of mosasaurs and plesiosaurs were found which was exciting to both Jim and Gorden Bell, Haslem Post-Doc at the Museum of Geology. They are looking forward to gathering more information about the Cretaceous marine fossils from this area in the near future. Jim is also pleased to report that the Mallory honorary volume is **finally** at the University of Washington printer<del>s</del> and

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that he is nearly done with the state geological map of South Dakota, as final funding was approved this spring.

Collection Manager/Preparator Carrie Herbel will be very busy this summer, as she hopes to finish preparing a beautiful though rather flattened *Camarasaurus* skull from the Little Houston Quarry. In addition, she will assist several graduate students with their field projects and instruct two field paleo classes. And finally, she will be continuing with the Fossil Conference planning and making sure that this conference runs smoothly in October. For more information on this conference, contact Rachel Benton at Badlands National Park.

Mike Greenwald has been a welcome addition to the Museum and he has helped in many curation and field projects since he arrived a year ago. He has curated specimens ranging from the Oligocene Pig Dig mammals to Cretaceous ammonites, and will soon be working with Jurassic dinosaurs. This has helped decrease the backlog of curation projects much to Carries delight. This summer he will be continuing the paleo salvage operation started last year along the Mni Wiconi Pipeline Project with Gorden Bell and many students. He is also looking forward at getting back into the Hell Creek deposits, as he assists Jim Martin instruct a field paleo class in northwestern South Dakota this June.

In November 1997, Reid and Mary Lee Macdonald went to Patagonia to join Pat and Tom Rich on their annual dinosaur trek. Their book entitled Æossil Collectors Guide@was recently published by Kangaroo Press. This book was a joint effort with several of Reids magazine articles and class handouts modified for Australian consumption. Pat, Tom, and Leaellyn supplied the rest with descriptions of Australian fossils, geology, and prospecting areas. This could be the first three-generation authorship on record! In addition, Reid and Mary Lee are finishing ÆaleontologyC 540 B.C. to 1990 A.D.Aand will probably be looking for a publisher before too long! (Carrie L. Herbel)

#### **Southwest Region**

## Mesa Southwest Museum, Arizona

Doug Wolfe enjoyed participating in Dinofest, and continues his studies on the Zuni ceratopsian, as well as other elements of the Zuni fauna.

Doug, Brian Anderson, Jim Kirkland, and Bob Denton all remain active on the Zuni Basin Project. Doug and Jim have two joint MSMBDinamation expeditions planned for this summer.

Brian Anderson, along with colleagues Reese Barrick (NCSU), Spencer Lucas (NMMNH), and Ken Stadtman (BYU), continues to conduct morphologic and taphonomic studies of hadrosaur skin impressions from the Campanian of Utah and New Mexico.

Heidemarie Johnson continues her work on placoderm fish from the western U.S., especially actinolepid arthrodires. Fieldwork includes sites in Nevada, Utah, Idaho, and Arizona. Besides identification and description, research focuses their biostratigraphic utility. Heides description of the Mount Elden fauna was recently published and she is advising the Museum on the Devonian Seas exhibit for the expansion.

Bob McCord has been busy teaching herpetology at the University of Arizona, as well as exhibit planning,

coordinating volunteers, managing the lab, and administration for the Museum. He has managed to get several manuscripts out and looks forward to fieldwork at several Arizona Cretaceous sites this summer. (Robert McCord)

#### New Mexico Museum of Natural History and Science

The NMMNH is currently running a Capital Campaign to raise money for various projects including a new Triassic Hall and an improved Cretaceous Hall. The campaign to date totals \$3.3 million, three-fourths of its way to meeting its goal of \$4.2 million by 2001.

The Museum ran its first Æossils of New Mexico Symposium@ast fall. The symposium was considered a great success and featured Paleozoic through Pleistocene paleontologic research in New Mexico. The symposium was accompanied by the publication of *NMMNH Bulletin* 11, ÆNew Mexico= Fossil Record 1,@ edited by S. G. Lucas, J. W. Estep, T. E. Williamson, and G. S. Morgan. The bulletin is available from the Museum= Natureworks store.

Another new bulletin, *NMMNH Bulletin* 12, *A*Permian Stratigraphy and Paleontology of the Robledo Mountains, New Mexico@edited by Lucas, Estep, and J. M. Hoffer, is also available from the Museum<del>s</del> Natureworks store.

The New Mexico Friends of Paleontology (NMFP) formally became affiliated with the Museum in February and now operates under the Museum s Foundation. We hope that the close official relationship between the Museum and the NMFP will result in even closer cooperation between the two groups. The NMFP hopes to sponsor a paleontology training program modeled after the Denver Museum of Natural History Paleontology Certification Program. A paleontology field course is being planned and is scheduled to begin this summer. Information about the NMFP and membership application forms are available from Charles Jaynes (NMFP President) at: NMFP, P.O. Box 26145, Albuquerque NM 87125-6145.

Thomas E. Williamson continues work on Upper CretaceousBPaleocene stratigraphy and paleontology of the San Juan Basin. Tom has his hands full this summer as he and crews under his direction plan on collecting a partial skeleton of a large tyrannosaurid and a skull of *Pentaceratops*, both in the Kirtland Formation (both discovered by Field Associate Paul Sealey). Tom and Robert Sullivan of The State Museum of Pennsylvania are wrapping up their description of a new skull of *Parasaurolophus tubicen* collected from the Kirtland Formation in 1995 (NMMNH P-25100) with a revision of the genus. This work will be published as a *New Mexico Museum of Natural History Bulletin*. Tom and Carl Diegert of Sandia National Labs have recently received a great deal of publicity concerning their ongoing research into modeling the sounds of *Parasaurolophus* based on the new skull. They have used CT data of the skull to reconstruct the skull passageways. Based on this reconstruction, they have built a computer model that runs on high-performance computers to determine the sounds that *Parasaurolophus* might have been able to produce. Williamson and Thomas Carr are also working on other recently collected Cretaceous dinosaur specimens. Thomas Carr recently spent two weeks in Albuquerque with Williamson working on describing a partial skull and skeleton of a small tyrannosaurid from the Kirtland Formation. This specimen (NMMNH P-25049) is particularly

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exciting as it appears to represent a juvenile Daspletosaurus.

After a several-year transition period from Florida to the Southwest, Gary Morgan has finally immersed himself in New Mexico late Cenozoic faunas. Gary and coauthors Paul Sealey, Spencer Lucas, and Andy Heckert recently described (in *NMMNH Bulletin* 11) the late Hemphillian Walnut Canyon local fauna and middle Blancan Buckhorn local fauna, both from the Gila River Valley in southwestern New Mexico. Description of the middle Blancan Tonuco Mountain local fauna from the Rio Grande Valley in southern New Mexico will appear later in the year in a New Mexico Geological Society Guidebook on the Las Cruces region. In a recent trip to the Virden area in southwestern New Mexico, Gary and Spencer Lucas discovered a nice sample of middle Blancan mammals, including lots of *Æquus@*and *ANannippus@*teeth, along with a *AMegalonyx@*femur, several bird bones, and land tortoises. Gary and Paul Sealey have recently revisited several previously known Pliocene sites in central and southern New Mexico, as part of their long-term project to document all Blancan and Irvingtonian faunas in New Mexico.<sup>s</sup> Rio Grand rift basins. Gary has recently begun a project with Nick Czaplewski at the Oklahoma Museum of Natural History to describe several extensive faunas of Oligocene and Miocene bats from sites in Florida.

Spencer G. Lucas continues on various projects.

Andrew Heckert finished his masters thesis at the University of New Mexico in July 1997 entitled ALithoand biostratigraphy of the lower Chinle Group, east-central Arizona and west-central New Mexico, with a description of two new theropods (Archosauria: Dinosauria) from the Bluewater Creek Formation.@Andrew is now working on his doctoral dissertation studying Late Triassic faunas of New Mexico.

Ancheng Ma finished his doctoral dissertation at the University of New Mexico in December 1997 titled AEarly Eocene micromammals in the San Jose Formation, San Juan Basin, New Mexico.@Casey Cook is working toward a master-s degree studying Permian vertebrates of New Mexico under Spencer Lucas. Pete Reser continues to work feverishly on completing the new Fossil Preparation Lab.

Jerry Harris has been hired as a contract preparator and recently arrived from Southern Methodist University. He is busily preparing phytosaur material from the Chinle Formation near Tucumcari, New Mexico, that will be installed in a new Triassic Life exhibit in the next few years. Jerry s master thesis, AReanalysis of *Acrocanthosaurus atokensis*, its phylogenetic status, and paleobiogeographic implications, based on a new specimen from Texas,@is in press as *New Mexico Museum of Natural History Bulletin* 13. Jerry s current research is focused on the skull of a new, small sphenosuchian from the Lufeng Formation of China and on some unstudied rauisuchian material from the Chinle. (Tom Williamson)

#### **Oklahoma Museum of Natural History**

Construction of our new facility is nearly complete, with final touches to occupy the next half year. Most of the collections including vertebrate paleontology are packed in anticipation of moving into the new building. Construction of exhibits continues at a feverish pace. Around the end of 1998 we will move in and begin the long process of unpacking, getting situated in our new surroundings, and installing exhibits. The place is scheduled to open in late 1999 or early 2000. Readers can visit our Web page at http://www.omnh.ou.edu/ and

view images of the new building under construction.

Richard Cifelli was pleased to learn recently that his Early Cretaceous research in the Cloverly and Antlers formations once again received funding from the National Science Foundation. Summer fieldwork will take place in Utah, MontanaBWyoming, and Oklahoma after a six-week trip to France and Poland to collaborate with colleagues Christian de Muizon and Zofia Kielan-Jaworowska on various projects. Nick Czaplewski has been working on a number of papers on fossil bats, including a new project with Gary Morgan, New Mexico Museum of Natural History, on the rich bat faunas from various Oligocene and Miocene sites from Florida. Randy Nydam recently submitted a manuscript portion of his doctoral dissertation on polyglyphanodontine lizards from the Cretaceous of Utah and Baja California Norte and continues to write other portions of his dissertation. Cindy Gordon continues her coursework as a new predoctoral student here while finalizing her masters thesis under Robert Martin at Murray State University, Kentucky. She will defend her thesis in May. Matthew Wedel has entered the masters program in zoology here and is working on a manuscript with Rich Cifelli on the cervical vertebrae of a giant brachiosaurid from the Antlers Formation of southeastern Oklahoma. Besides coursework, new student Pat Goldberg recently submitted a manuscript extracted from her masters thesis on skeletal osteology and discriminant analysis of columbid birds. (Nick Czaplewski)

# University of Texas Department of Geological Sciences, Department of Anthropology, and Vertebrate Paleontology Laboratory.

We are very happy to welcome Chris Bell, notorious and recent escapee from UC Berkeley, who has joined the faculty of the Department of Geological Sciences. Chris not only survived his first two semesters of teaching, but he already has the rest of us racing to keep up with the pace he has set for teaching and research. He is continuing his work on Irvingtonian microtine rodent biochronology and on squamate phylogeny, and he brings a simply amazing personal collection of specimens and reprints that are a terrific supplement to our collections. The coming years promise to be exciting for us all.

Chris will become the sole proprietor of our Quaternary VP teaching program next August, when Ernie Lundelius will retire at 70 years of age and 40 years of service to UT. Ernie was an undergraduate at UT and he worked for Jack Wilson shortly after Jack founded the Vertebrate Paleontology Lab. So, Ernies real record of service to VP in Texas is more like 50 years. If Ernie follows the tradition of the previous Vertebrate Paleontology Lab directors, his retirement will be a more an administrative technicality than a change of pace. Ernie looks forward to handing off the administrative BS and spending more time collecting. A symposium on Quaternary Vertebrate Paleontology will be held in Ernies honor this November 13 in Austin. Details will be distributed over the vertpaleo listserver and our Web site.

Wann Langston, Jr., has been occupied for some time in reconstructing a skeleton of *Quetzalcoatlus* sp., which is to serve as a guide for the much more ambitious task of making a full skeletal reconstruction of the huge *Q. northropi*. The latter is currently under way at Matt Smiths studio. In spite of all the material available the project is daunting because of the lack of detailed information about osteology of pterodactyloids in generalC that would never be suspected from all the beautiful illustrations in the literature.

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Our recent graduates include Chris Brochu, who defended his dissertation on crocodylian phylogeny and immediately took a postdoctoral position at the Field Museum of Natural History, where he is studying their celebrated *Tyrannosaurus* skeleton. More recently, John Merck, Jr., completed a gargantuan dissertation on the phylogeny of euryapsid reptiles, and has now caught his breath and is embarking on the publishing and job-hunting phase of his career. The University seems empty without these two, but we look forward to their professional accomplishments.

The High-Resolution X-ray CT-scanning facility is now a year old and

it has served roughly 50 researchers. We e scanned everything from Martian meteorites to Mongolian Cretaceous mammals, and we are slowly preparing more data for publication on the Web and on CD-ROM. Some of these specimens have yielded exquisite datasets, and we are now looking for funding to cover their digital publication, once any proprietary research on the specimens has been completed.

The Vertebrate Paleontology Laboratory is in the throes of badly needed building repairs and renovations, but it is causing considerable disruption to our daily operation. During the summer, access to the collection will be difficult or impossible. If you anticipate needing access to particular specimens, let us know right away or you may have to wait until the fall.

Some administrative changes have taken place over the last year. We welcome Oscar Alcober, who arrived last year as a postdoctoral research and who is now our acting Collections Manager. Oscar, obviously, has had a big impact on our program already. He brings great expertise in Mesozoic archosaurs and stratigraphy, and many skills with museum exhibits and interpretation. We also welcome Laura Froehlich, who has returned to VPL and is assisting collections management and VPL administration. Any inquiries regarding our collections should be directed to Oscar Alcober. Melissa Winans, who was our Collections Manager for nearly two decades, will remain close by, as the manager of the Texas Memorial Museum computer network. In her new position, we still have access to Melissa <del>s</del> expertise with our collections, and we will benefit from the improved network for the Museum as a whole.

The third edition of our AAge of Dinosaurs@CD-ROM (T. Rowe, K. Kishi, J. Merck, Jr., and M. Colbert) was just published by W. H. Freeman and Company. It is now shipping as a stand-alone disc (Mac/PC) or in an academic bundle with AThe Mistaken Extinction@(L. Dingus and T. Rowe), also published by Freeman. The CD was designed for our freshman course of the same name and we tested it successfully this spring semester along with the new book.

VP graduate students are working on a variety of projects. Matt Colbert is completing his dissertation on the tapirs, using CT data from living species to explore the peculiar sinuses of tapirs and to provide new systematic data on tapir phylogeny. Pamela Owen is continuing her work on mustelid phylogeny and the evolution of digging adaptations. She spent part of her spring break at the LACM examining specimens of *Pliotaxidea nevadensis* and *Taxidea mexicana*. Chris Sagebiel is finding that the Pleistocene fauna from Zesch Cave is more diverse than he originally thought. Ron Tykoski is wrapping up his masters work on *Syntarsus kayentakatae* and the Shake-N-Bake ceratosaurs from the Kayenta Formation of Arizona. He will be entering the doctoral program in the fall and intends to continue study of ceratosaurs and other primitive

theropods. Gerald Grellet-Tinner is investigating eggshell structure in ratites and other dinosaurs, and is slowly bringing eggshell characters into the phylogenetic system. David Dufeau is a new masters aspirant in our program, who will be working on avian phylogeny and using high-resolution X-ray CT to explore the skulls of modern ratites, galliform, and anserifiform birds.

Work on several field and lab fronts continues in anthropology. John Kappelman (UT-A), Mikael Fortelius (Helsinki), Ray Bernor (Washington, D.C.), and Sevket Sen (Paris) are aiming to wrap up their editorial duties on the publication of the Sinap Formation (Miocene, Turkey) with Columbia University Press in 1998. This multi-authored monograph will provide detailed information on the dating and the various faunal groups that resulted from seven years of fieldwork supported by NSF, the Finnish Academy of Sciences, and the L. S. B. Leakey Foundation. Kappelman is also wrapping up the paleomagnetic dating of the Eocene Yuanqu Basin (in collaboration with Chris Beard and Mary Dawson of the Carnegie Museum, Tong Yongsheng of the IVPP-Beijing, and Wulf Gose and Tim Ryan of UT-A) as well as the Rohtas section, Pakistan (Kay Behrensmeyer, Smithsonian) and Manonga, Tanzania (Terry Harrison, NYU). These efforts have been greatly facilitated by the purchase of a new cryogenic magnetometer that replaces the old helium-hog that had been in the lab for 20 years.

The anthro lab group has just released a CD-ROM, AVirtual Laboratories for Physical Anthropology@(J. Kappelman, editor, Wadsworth Publishing Co.) that includes ten laboratories that cover the range of topics usually taught in physical anthropology. The CD includes color images, video, sound, and 3-D animations of fossil skulls and skeletal elements, all mastered within a highly interactive environment that includes measurement and plotting exercises. If your cast collection of fossil primates and humans is on the thin side, you<sup>±</sup>l find good color images and 3-D animations of most of the material here.

The anthro grad students are making good progress. Tim Ryan and Rob Scott are entering into the Ph.D. phase of their studies. Ryan is using the finite element method to study limb architecture in hominoids and will be making use of X-ray CT data, while Scott will be investigating the paleoecology of late Miocene Old World fossil localities. Mulugeta Feseha (UT Geological Sciences) is preparing to defend his prospectus on the geology of western Ethiopia. In May Erik Seiffert submitted his M.A. thesis on the quantification of orbit aperture shape in hominoid phylogeny. We also welcome Adam Gordon to the program.

Mary Maas has recently taken an adjunct position in anthropology and has space in the VP lab. Maas, Hans Thewissen (NEOUCOM, Ohio), and Kappelman recently published on the newly discovered Eocene faunas of central Turkey (*Bulletin of Carnegie Museum* no. 34:286B297, 1998; see Publications section, this issue). Kappelman also initiated a new field project in western Ethiopia during January 1998. He was joined in the field by John Fleagle and Brian Richmond (Stony Brook), and Mulugeta Feseha and Erik Seiffert (UT-A). Stay tuned for the results from their survey work. (Tim Rowe)

#### Rocky Mountain Region Brigham Young University

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Personnel at Brigham Young University are still actively involved in the pursuit of collecting dinosaurs and other fossil critters. Ken Stadtman and Dee Hall have been working the Dalton Well dinosaur quarry in conjunction with Brooks Britt and Rod Scheetz of the Museum of Western Colorado. This early Cretaceous site continues to produce an interesting fauna. Some of the dinosaurs collected include iguanodont, notosaurid, theropods (including *Utahraptor*), and at least two sauropods. One is a probable new genus of titanosaurid which will be discussed in an upcoming paper by Brooks, Ken, Rod, and Jack McIntosh. The Dry Mesa quarry will also be worked later this season. Collecting then should include everything up to the steep backwall of the quarry.

Most of Wade Millers research time has been spent in Mexico with Oscar Carranza in their fieldwork on late Tertiary vertebrates from central Mexico. These efforts now extend from the state of Hidalgo west to southern Baja California. Many new local faunas have been discovered in an attempt to better understand the overall fauna from this part of the country. One of the goals of this study is to gain better chronologic precision with the faunas. In this regard Oscar and Wade have been assisted greatly by Bart Kowallis and Carl Swisher (radiometric datings), as well as by Ev Lindsay, John Flynn, and Clarita Nuñez (geomagnetic datings). Bruce MacFadden, who has also been with us in the field, has shown interest in isotopic studies relating to the fauna. Several articles are now either in press or in preparation on this work.

Wade made a brief visit to Saltillo, Mexico, in March to see the important dinosaur finds that are being made in that area. Intercalated Late Cretaceous marine and nonmarine beds are extensively exposed there and have yielded a wealth of plant, invertebrate, and vertebrate fossils. Jim Kirkland, Mike Perry, and Dinamation have been involved in helping Rosario Gómez and others of Saltillo, and René Hernández of UNAM develop this very valuable resource.

From time to time Pleistocene fossils are brought to our attention by workers at the Geneva Sand and Gravel Pit north of us. Richard Trotter has continued to bring in great material, including a very nicely preserved *Bootherium* skull. Joe Miller brought in a partial *Megalonyx* skeleton recently which Greg McDonald and Wade will be describing soon. It a real pleasure to have people interested enough in science these days to actually *donate* specimens. The above-named persons are to be highly commended.

Scott Rufolo is nearing completion of his masters studies here and plans to continue on, possibly in England, to pursue a Ph.D. degree. He is working on the late Pleistocene vertebrate fauna from Lago de Chapala in the state of Jalisco, Mexico. The collection was made by people at the Natural History Museum of Los Angeles County many years ago, but has not received an in-depth study until now. This collection is currently on loan to BYU. (Wade E. Miller)

## Fossil Butte National Monument

There are many changes and happenings to report from Fossil Butte National Monument. Vince Santucci has moved into a new assignment with the National Park Service. Vince works in a shared position between Fossil Butte and the NPS Geologic Resources Division (GRD). The GRD position is designed to provide paleontological resource support throughout the NPS in parks that lack a staff paleontologist. Vince is

involved with paleontological surveys at Big Bend NP, Bighorn Canyon NRA, Colorado NM, Death Valley NM, Grand Canyon NP, Grand Teton NP, Guadalupe Mountains NP, Timpanogos Cave NM, Yellowstone NP, Zion NP, and the Alaskan parks.

Arvid Anse was hired in April to serve as the park curator at Fossil Butte. Arvid is completing his masters program at the University of Kansas. He will coordinate activities associated with two quarry excavations and the monuments preparation lab. Arvid volunteered at Fossil Butte during the winter, assisting with the republication of *Park Paleontology* Newsletter.

Two paleontology interns will be hired during the summer of 1998. Merry Bacon (Georgia University and State College) and Marrika Hughes (Yale University) were selected from a list of over a dozen applicants. The interns will assist with quarrying operations, fossil preparation, and interpretation.

Lance Grande is working on the description of a new fossil Apike@found in Fossil Basin in 1997. The specimen was donated to the Field Museum of Natural History by Bob Kronner. Paul Buchheim and a team of students from Loma Linda University will continue fieldwork related to sedimentology and paleoenvironments of the Fossil Lake in and around Fossil Butte National Monument. Bill Bartels and Gregg Gunnel spent the past few summers surveying Wasatch Formation exposures on the monument.

Two SVP field trips are scheduled in conjunction with the upcoming annual meeting in Salt Lake City, Utah. The park staff is planning a number of special exhibits in association with these field trips. A series of original paintings are being produced by artist Rich Penny to depict the Eocene Wasatch and Green River fauna and flora. (Vince Santucci)

## Museum of the Rockies, Montana State University BBozeman

The Museum of the Rockies welcomes its new Dean and Director, Marilyn Wessel. Ms. Wessel joined the staff at Montana State University in 1982 as Director of Communications and Special Assistant to the President. In 1990 she was appointed Director of the Office of University Relations with senior staff responsibility for the University-s public relations and governmental relations programs. Following a nationwide search, she was appointed to the Museum Deanship in November 1997.

Ms. Wessel holds an undergraduate degree in journalism from Iowa State University and a master-s degree in public administration from Montana State University. She has also done post-graduate work at the Harvard Institution for Education Management and was the recipient of a Senior Congressional Fellowship.

Ms. Wessel is past president of the Montana Ambassadors, a group of business and education leaders who work with the Montana Department of Commerce on economic development for the state and region.

Jack Horner has been working on numerous projects including the histology of embryonic and neonatal dinosaurs, a review on parental care in dinosaurs, the cranial anatomy of *Hypacrosaurus*, a new skeleton of *Brachylophosaurus*, the osteohistology of pachycephalosaur skulls with Mark Goodwin, a new baby *Triceratops* with Mark and Bill Clemens, *Troodon* embryos with Dave Varricchio, and new studies of the Egg Mountain area with a variety of people. Jack has also been working closely with Celeste Horner, getting the paleontology collection on line (museum.montana.edu). He currently toured a number of colleges as a Phi

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Beta Kappa Visiting Scholar, and has a new book out entitled ADinosaur Lives,@co-authored with Edwin Dobb.

Pat Leiggi continues to administer the Department of Paleontology along with his duties for the Museum seresearch and collections division. He is currently working on a curation facility project for the Museum that will be designated for research and collections divisional use. He continues his work as co-chair of the GLC with Mike Woodburne and Ted Vlamis. Pat is co-authoring a children book about Big Al with Brent Breithaupt. He is also working on a U.S. Fish and Wildlife Service Inventory for paleontological specimens collected from refuges in Montana and Wyoming. If you have any collections information in regards to specimens collected from these refuges, Pat would be most appreciative if you would contact him at (406) 994-3983; e-mail pleiggi@montana.edu.

The inventory covers the following refuges: National Bison Range, Montana; Red Rock Lakes National Wildlife Refuge, Montana; Bowdoin National Wildlife Refuge, Montana; Medicine Lake National Wildlife Refuge, Montana; Lee Metcalf National Wildlife Refuge, Montana; Charles M. Russell National Wildlife Refuge, Montana; Benton Lake National Wildlife Refuge, Montana; National Elk Refuge, Wyoming; and Seedskadee National Wildlife Refuge, Wyoming.

Bob Harmon finished skeletal mounts of *Allosaurus* and *Deinonychus* for the Museum of the Rockies exhibit, *AT. rex* on Trial.@The exhibit will be at the Museum until spring of 1999 and will then travel to museums around North America. If your institution is interested in renting the 6,000 sq ft exhibit, please contact Pat Leiggi at (406) 994-3983.

Bob and Carrie Ancell had a busy field season in 1997 covering a large area of upper Cretaceous formations in Montana. They collected a partial hadrosaur in the Hell Creek Formation on BLM land and excavated a spectacular *?Thescelosaurus* skeleton from the Hell Creek in Makoshika State Park near Glendive, Montana. Over the winter Bob and Carrie were instrumental in reorganizing the collections and lab areas for AAM re-accreditation. At this time Carrie is preparing an articulated *Brachylophosaurus* skeleton while Bob works on the *?Thescelosaurus* skull. Dave Baier has temporarily joined the paleontology staff in the lab and is preparing sauropod material from the Mothers Day site.

Ellen Lamm has prepared thin sections of quite a range of fossil material such as pterosaur, amphibian, *Orodromeus, Hypacrosaurus, Maiasaura*, lambeosaur, *Troodon*, various theropod teeth, and crocodile. She also prepared slides of numerous eggshell samples (for Jamie Powell of Argentina), as well as a *Dryosaurus* growth series for Dr. Rod Sheetz. Since the birth of a baby girl (Rebecca) last year, Ellen is working the late shift and is in the middle of a variety of projects. She is preparing thin sections of many baby bones of extant material such as bird, turtle, alligator, and emu. This fall she sectioned pachycephalosaur domes, as well as various armature-type samples. She is cutting lots of baby bones, and is working with Celeste Horner to reassemble our 2-D microscopic images into 3-D wonders. Lots of time has also been spent working with our imaging cameras, and capturing and analysis systems as we prepare to purchase some new equipment.

Montana State University undergraduate student Lisa Cooper is also working in the histology lab this year. Lisa is researching growth rings on a *Hypacrosaurus* skeleton from the MOR collections. She is also studying

the most selectively advantageous way to position a dinosaur in a spherical or elliptical egg.

Research Associate Ralph Nichols has returned to paleontology and is helping out in the laboratory preparing oreodontid material. Ralph will be studying many of the mammal specimens from a bonebed that Horner and Leiggi discovered in 1986. They are real happy to have a mammal specialist like Ralph at the MOR. For those of you that knew Ralph years ago, drop him a line and say hello!

Research Associate Ken Olson made a large contribution to the paleontology collections last fallCa *Torosaurus* skull measuring approximately 9 ft in length! Frankie Jackson is working on fossilized eggs from several new localities and the occurrence of pathological eggshell in some dinosaur species. Pat Druckenmiller continues to work on a description of a plesiosaur collected in central Montana. The project is nearing completion and is the focus of his master<del>s</del> thesis.

Jim Schmitt, Jack Horner, Frankie Jackson, and Rebecca Laws of Montana State University are attempting to reconstruct the genesis of a hadrosaur-bearing bonebed deposit in a sequence of fluvial and lacustrine strata in the Upper Cretaceous Two Medicine Formation at the Willow Creek anticline near Choteau, Montana. This bone bed contains thousands of disarticulated bones of *Maiasaura peeblesorum* and is laterally extensive. Their study is incorporating elements of process sedimentology, stratigraphy, provenance analysis, taphonomy, and histology to determine if the deposit represents a single sedimentation event (e.g., debris flow, ash fall) or a time-averaged accumulation of skeletal elements. (Patrick Leiggi)

#### University of Colorado Museum, Boulder

Peter Robinson spent much of last summer collecting and identifying vertebrates from a Paleolithic cave site in Cognac, France. During this academic year he devoted the majority of his time to fossil identification and curation of our collections, as well as studying adapid primates from the early Eocene rocks of the Powder River Basin, Wyoming. As the next field season approaches, he is looking forward to teaching UCM<del>s</del> Paleontological Field School which will take place in northwestern Colorado. He also has collecting trips planned to his old haunts in the Powder River and Bridger basins of Wyoming.

Peter Robinson and newly appointed Collections Manager Paul Murphey began the implementation of a three-year NSF Collections Improvement Grant last September. This grant could not have come a better time for our paleontology collections, as it will permit the curation of a vast backlog (more than 20,000 specimens), upgrading of the existing collections, and purchasing of additional archival cabinetry before the collections move to a newly renovated building in a few years. Since last September, over 8,000 specimens have been identified, curated, and housed. It is truly exciting to see the improvements to our collections from the Bighorn Basin, Powder River Basin, Piceance Creek Basin, Cenozoic of Africa, and several other smaller collections that have already occurred. The grant also includes a curatorial revamping of our osteology collection and a lot of fossil preparation!

Paul Murphey is greatly enjoying the Collections Manager job, and wishes he could clone himself so he could work on all the collections projects he wants to do simultaneously! He has recruited a great group of volunteers this year, who, along with graduate assistants, work-study students, and mentoring students, are

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making all the difference to our operation. As the Museum gears up for planning our move, he hopes to learn a lot about moving collections at the SPNHC meetings in Edmonton in May. Paul is also busy writing up the taphonomy of the *Omomys* quarry (Bridger Formation) with Lisa Torick, Emily Bray, Bob Chandler, and Emmett Evanoff.

Judith Harris is greatly enjoying partial retirement in Chama, New Mexico. When in Boulder, she devotes her time to curation of our Osteology Collection, which is slated to be in great shape by the time she finally retires in 2000. Bert Covert is excited to begin field studies in Vietnam this summer. Emmett Evanoff is busy working on a variety of research projects, including the stratigraphy of Badlands National Park with Rachel Benton, and the stratigraphy of the Bridger Formation with Paul Murphey and Leonard Brand.

John Foster is planning to defend his dissertation on Morrison Formation vertebrates in late April. Jon Bennett is hoping to finish his masters thesis on arctocyonid condylarths by next Christmas, and is becoming very interested in the origin of artiodactyls. For his masters thesis project, Dave Daitch is initiating a geologic and paleontologic study of a fossiliferous horizon in the middle Bridger D, Wyoming. Melissa Burke is continuing her masters research on *Microsyops* and the stratigraphy of the Wasatch Formation in the Washakie Basin, Wyoming. (Paul Murphey)

## University of Wyoming, Department of Geology and Geophysics and Geological Museum

A good deal of Jay Lillegravens time in recent months has gone to effecting the birth of *Rocky Mountain Geology*. This journal is the successor to *Contributions to Geology*, which produced it last issue (volume 32, number 2) in March of this year. *Rocky Mountain Geology* will begin with volume 33, number 1 (Spring 1998). The journal is dedicated to all aspects of original research on the geology and paleontology of the greater Rocky Mountain region. Selected readers out there may find the fully redesigned format and the typically small number of included cladograms refreshing. The other two editors are Donald W. Boyd and Arthur W. Snoke. Watch for the aspen-leaf logo.

Mike Cassiliano has resettled down to life in Laramie. Most of his time has been spent curating the Collection of Fossil Vertebrates as years of neglect and growth are finally yielding to order and proper conservation. Additionally, he has begun to reorganize and set up a computer database for the Department<del>s</del> Collection of Rocks and Minerals (a nearly, but not quite hopeless, task). In between these tasks, Mike has been teaching comparative chordate anatomy in the Department of Zoology and Physiology. Somehow, he has also found time to see his paper proposing the Huesos Member of the Palm Spring Formation as a formal lithostratigraphic unit become a reality in volume 32 of *Contributions to Geology*, and put the finishing touches on the manuscript about the stratigraphic nomenclature of the rest of the Palm Spring Formation. He just received the reviewed manuscript on the biostratigraphy of the Blancan and Irvingtonian from *JVP* and will begin the revisions as soon as the Palm Spring manuscripts go off to a potential publisher. The organization for the Paleoecology Symposium at SVP <del>9</del>8 rolls along smoothly and Mike is looking forward to seeing the results. Once again, anyone who has borrowed fossils from The University of Wyoming<del>s</del> Collection of Fossil Vertebrates and is finished studying them is asked to please return them.

Penny Higgins has completed one more semester toward graduation. Her research has been moving forward steadily, with the unique taphonomy of the Hanna Formation nearly worked out, and the fauna about one-third described. This summer will be spent mostly in the lab, working on getting the fauna as fully described as possible, with occasional trips to the field to break up the drudgery. All in all, things are still on schedule for a timely graduation next year.

Michael Webb continues his degree program coursework, which has recently resulted in several academic honors. He has received a Questar Corporation Educational Fund Scholarship, joined Phi Kappa Phi Honor Society, and has been nominated to the National Dean-s List and Who-s Who among Students in America in American Universities and Colleges. Michael continues his research on Lancian mammals between classes, currently studying a multitude of multituberculates. The summer of 1998 will bring a few weeks of fieldwork in the Bighorn Basin, and the study of many, many more mammal teeth. Continuing projects include the description of new late Paleocene mammals from Alberta, Canada.

Kelli Trujillo has spent time this spring screenwashing surface material from a new microvertebrate site in the Morrison Formation. She has had good luck finding mammal teeth, and is looking forward to quarrying the site starting in mid-May. Later in the summer she will once again work at an *Apatosaurus* site for the National Park Service near her home in Gunnison, Colorado.

John Burris has postponed his graduation at the University of Wyoming to continue working on and improving his thesis centered on the Hanna Basin. After a productive spring semester, he plans to finish writing over the summer and defend during the early part of the fall semester. His work deals partly with reworked Late Cretaceous shark and ray teeth found in the Paleocene Hanna Formation. Using these teeth as well as other sedimentological and structural evidence, he will address the provenance of the sediment of the Hanna Formation, and address the erosional/depositional evolution of the Hanna Basin.

Anton Wroblewski spent the spring semester taking classes and gathering sedimentological, architectural, and biostratigraphic data from Paleocene strata of southern Wyoming as part of his dissertation research. He continues his manly efforts to test models of sand body stacking patterns in foreland basins using subsidence analysis, architectural elements, and lithofacies assemblages of fluvial and estuarine channel belts in latest Cretaceous and Paleocene strat. This summer, in addition to more fieldwork, he<sup>±</sup>l be working as part of a field crew with Jaelyn Eberle (Rice University) and J.-P. Cavigelli (Laramie) among others as part of a Houston Museum effort to recover ceratopsians from the Hell Creek Formation in South Dakota.

Brent Breithaupt (UW Geological Museum) continues to revamp displays and develop new public and education programs. Along with museum assistant Beth Southwell and a variety of individuals from other institutions, Brent is working on an important Middle Jurassic track site in northern Wyoming on lands administered by the BLM. The Red Gulch Dinosaur Tracksite preserves thousands of footprints in the Lower Sundance Formation. Brent continues his research on various lower vertebrate faunas and the history of western vertebrate paleontology. (Brent Breithaupt)

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# FIELD PALEONTOLOGY THROUGH THE MUSEUM OF GEOLOGY, SOUTH DAKOTA SCHOOL OF MINES AND TECHNOLOGY

One- to two-week openings are still available for some of our field paleo classes held throughout the summer; these classes may be taken for college credit. **June 15B26**: Late Cretaceous dinosaurs and other vertebrates from northwestern South Dakota; led by Dr. Jim Martin and Mike Greenwald with special guest Pat Monaco as camp cook. **June 15B26**: Badlands National Park Pig Dig; excavate a tangle of *Archaeotherium* and *Subhyracodon* in the classic White River Badlands; led by Carrie L. Herbel. **July 6B17**: Jurassic dinosaurs and mammals I or **July 20B31**: Jurassic dinosaurs and mammals II near Sundance, Wyoming. The Afound@ world of *Camarasaurus*, *Allosaurus*, and tiny primitive mammals are present at this exciting locality; led by Dr. Jim Martin. **August 3B14**: Marine turtles, mosasaurs, and plesiosaurs from the Late Cretaceous; excavations along the Missouri River near Chamberlain, South Dakota; led by Dr. Jim Martin, David Parris, and Gorden Bell. A follow-up session August 17B28 is also available. **August 17B28**: The Unwily Coyote Site, a series of Pliocene fissure and cave deposits in the northern Black Hills; with camels, coyotes, and a diverse assemblage of tiny vertebrates; the setting is especially conducive for fieldwork; led by Dr. Philip Bjork.

For more information, call 1-800-544-8162 ext. 2467, or write Philip Bjork, Museum of Geology, 501 E. Saint Joseph St., Rapid City SD 57701.

# C CALENDAR OF EVENTS C

## LOWER AND MIDDLE CRETACEOUS TERRESTRIAL ECOSYSTEMS: FILLING THE GAP

An international symposium to present new findings on the Lower and Middle Cretaceous terrestrial biota to be held at the Dinamation-s Dinosaur Discovery Museum, 550 Jurassic Court, Fruita CO 81521, October 7 and 8, 1998.

More than 30 papers on biostratigraphy, biogeography, and terrestrial faunas are being presented. The proceedings volume will be distributed to those attending the meeting and is edited by James I. Kirkland and Spencer Lucas and published as a *New Mexico Museum of Natural History and Science Bulletin*.

The symposium follows the 1998 annual meeting of SVP in Salt Lake City, Utah, and an SVP-sponsored post-meeting field trip October 4B6.

For more information, please contact Cretaceous Symposium, Dinamation International Society, 550 Jurassic Court, Fruita CO 81521; phone (970) 858-7282, fax (970) 858-3532, e-mail dis@gj.net.

## CONFERENCE ON THE PURBECK FORMATION AND ITS VERTEBRATES

Life and Environments in Purbeck TimesC a multidisciplinary symposium on the Purbeck Formation and its fossilsC will be held at Dorset County Museum, Dorchester, Dorset, UK, on March 19B22, 1999. There will be three days of papers and discussions and a one-day field excursion to classic Purbeck localities. Themes will include the stratigraphy, sedimentology, paleontology, paleoecology, paleoenvironments, paleoclimate, and paleogeography of the type Purbeckian (Upper JurassicBLower Cretaceous) in both European and world contexts. There will be contributions on most vertebrate groups represented at Purbeck.

First circular with details available from: Andrew Milner, Department of Biology, Birkbeck College, Malet Street, London WC1E 7HX, United Kingdom. Fax +44(0)171-631-6246; e-mail a.milner@biology.bbk.ac.uk.

# C PUBLICATIONS C

## DAWN OF THE AGE OF MAMMALS IN ASIA

Now available from Carnegie Museum of Natural History, *Bulletin of Carnegie Museum of Natural History* no. 34, ADawn of the Age of Mammals in Asia, @edited by Chris Beard and Mary Dawson, presents the results of the symposium held at the SVP annual meeting in Pittsburgh in 1995. List price is \$54.95, but the publication is available in a special, limited-time offer of \$49.95 to individuals on orders postmarked by 31 October (limit three at this price). Postage and handling is an additional \$4.00 per copy (domestic), \$6.50 per copy (foreign addresses). Pennsylvania residents please add 6% PA sales tax. Checks (made payable to Carnegie Museum of Natural History), Visa, MasterCard, and institutional purchase orders are accepted. Mail orders to Office of Scientific Publications, Carnegie Museum of Natural History, 4400 Forbes Avenue, Pittsburgh PA 15213-4080; fax (412) 622-8837 (attention Scientific Publications); or e-mail scipubs@clpgh.org.

# **C POSITIONS AVAILABLE C**

## **GRADUATE FELLOWSHIP ANNOUNCEMENT**

The University of Florida is pleased to announce the Lucy Dickinson Graduate Fellowship in Vertebrate Paleontology. Candidates should apply to the graduate program of an appropriate academic department (e.g., zoology, geology, anthropology, or wildlife) at UF and mail a copy of the application cover, along with a letter of intent, to the Lucy Dickinson Fellowship, Florida Museum of Natural History, 222 Dickinson Hall, University of Florida, Gainesville FL 32611-7800. The stipend will be \$16,000 for the year August 1999 to August 2000. Duties include satisfactory progress in the chosen graduate program and curation experience in the Florida Museum. A Lucy Dickinson Fellowship can be repeated in the final year of graduate studies. For more information about vertebrate paleontology at the Florida Museum of Natural History, consult http://www.flmnh.ufl.edu/natsci/vertpaleo/vertpaleo.htm.

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## UTAH GEOLOGICAL SURVEYCPOSITION OF STATE PALEONTOLOGIST OF UTAH

The Utah Geological Survey (UGS) invites applications for the position of State Paleontologist of Utah (Senior Geologist). This position begins approximately November 1, 1998. Duties of the position include: 1) conduct field surveys, excavations, laboratory research, and curation, and publish results in house and in outside publications; 2) pursue funding and prepare proposals for priority paleontology projects; 3) advise the Director of the UGS on paleontological issues of local, state, and national significance; 4) issue permits for paleontological excavations; and 5) promote the paleontology of Utah through collaboration with other paleontologists, cooperation with Utah museums, support and guidance of amateur organizations, and supervision of volunteers. Preference will be given to individuals with an advanced degree in geology (paleontology specialty) or other earth science degree and experience in excavation and laboratory preparation of vertebrate fossil specimens. The UGS has just completed a new specimen preparation laboratory. Minimum starting salary \$34,278 with an excellent benefit package. Submit a resume and Utah Skill Match cover sheet (which can be found at www.ugs.state.ut.us or obtained from Cheryl Ostlund at 801-537-3300) to the Department of Human Resource Management, 2120 State Office Building, Salt Lake City UT 84114. On the top right hand corner of the Utah Skill Match cover sheet, please enter 8NR9UG in the blank for the Source Code. In addition, applicants may contact the Department of Natural Resources=Human Resource Office at 801-538-7210 to ensure consideration for this position. The state of Utah is an equal opportunity employer.

# C OBITUARIES C

### **ERIK JARVIK, 1907B1998**

Anders Erik Vilhelm Jarvik (né Johansson) celebrated his 90th birthday on November 30 last year and died on January 11 this year. He was truly one of the most important paleozoologists of the century, and his scientific work has had a major impact on our thinking about the evolution of vertebrates.

Jarvik was a farmers boy. He entered Uppsala University in 1927 as a potential major in history, but his previous studies failed to meet the admission criteria. So instead he read botany and then zoology, geology, and paleontology. During the summer of 1932 he was a member of a Danish geological expedition to the Devonian of central East Greenland. Back in Uppsala he studied geography and did some geographical fieldwork. The results of the latter were published in 1934, in his first scientific paper. He revisited East Greenland seven times and also spent two summers in Spitsbergen.

In 1934, Jarvik arrived at the Palaeozoology Section of the Swedish Museum of Natural History (Naturhistoriska Riksmuseet) and soon developed an incurable addiction to the history of life. He spent the next 62 years at the museum, ascending the academic ladder from assistant (1937) to professor (1960). After his retirement in 1973 he maintained a full schedule of research activities through the 1980s and early 1990s.

He married Ulla Grenholm in 1942 and is survived by her and their two children. In 1942, he also

completed his doctoral thesis on the morphology and evolution of the snout of gnathostome vertebrates. The following year he received his Ph.D. from Uppsala University.

Jarvik devoted two-thirds of his life to the evolution of vertebrates. To this end he used retro-evolutionary analysis, interpretation of fossils by comparisons with extant life forms, adults and/or embryos. The fossils were largely collected in Devonian deposits of the Arctic. He procured the cranial morphology of some of these fossils with the use of Sollas=grinding method and enlarged wax-plate models made from the ground sections. This time-consuming technique enabled study of the three-dimensional morphology of the plagio-stome and teleostome crania from Paleozoic and Mesozoic times. One of these serially ground fossils is the osteolepiform fish *Eusthenopteron foordi* from the Upper Devonian of Miguasha, Canada. To this day, it is still the best-studied fossil fish mainly because of Jarvik<del>s</del> exquisite morphological work.

Over the years Jarvik arrived at his own view about the evolution of vertebrates, outlined in his book ABasic Structure and Evolution of Vertebrates@(1980, Academic Press). An important constituent of this view is that tetrapods have evolved more than once. More precisely, because of profound anatomical similarities Jarvik concluded that urodeles are descendants of porolepiform fishes, whereas the majority of the remaining tetrapods, the eutetrapods, are descendants of osteolepiform fishes. This hypothesis, which goes back to Jarvik doctoral thesis, has very few adherents nowadays. Nobody, however, has been able to prove it wrong. In 1981, an Anglo-American quartet made an attempt to revive the old notion that tetrapods and lungfishes are collateral relatives. Jarvik reply (in *Systematic Zoology*, 30:378B384) countered that his four cladistic critics had overlooked well-known facts, while themselves contributing some mistakes and inaccurate descriptions.

Jarvik was unwilling to accept cladistics. He once wrote: At is not with cladistic terms but through comparative studies of extant and extinct vertebrates that phylogenetic knowledge increases.@It is interesting to note that an early milestone in the cladistic movement was an unscheduled talk delivered in 1967 by the late Swedish entomologist Lars Brundin, with Jarviks permission, at the Fourth Nobel Symposium in Stockholm. Incidentally, this symposium, under the title ACurrent Problems of Lower Vertebrate Phylogeny,@ was organized by Jarvik and his colleagues in Stockholm, and the resulting book (1968) is an informal Festschrift to Erik Stensiö, Jarviks predecessor. Another Festschrift, jointly to Jarvik and Stensiö, was published by the Linnean Society of London in 1973.

In addition to the non-monophyly of the tetrapods, Jarvik formulated theories that lungfishes and acanthodians are related to elasmobranchs, rather than to bony fishes; that elements of branchial arches have been incorporated into the endocranium; that the mammalian ear ossicles are derivatives of one and the same branchial arch and, hence, that the Reichert-Gaupp theory is questionable; and generally, that the recorded history of vertebrates is one of stasis rather than change, with all the major changes occurring in a period unrepresented in the fossil record. An assessment of Jarviks work, attributed to the late A. S. Romer of Harvard, is Abrilliant descriptions but bizarre conclusions.@However, only time can prove these ideas to be Abizarre.@Recall that many novelties with long-term significance have been treated similarly (witness the new Aatonal@music at the turn of the century, which critics likened to a cat walking on a keyboard of a piano).

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Jarvik was elected a fellow, member, or honorary member of the Linnean Society of London, the Royal Swedish Academy of Sciences, the Royal Society of Sciences at Uppsala, l=Académie des Sciences à l=Institut de France, and the Society for Integrative and Comparative Biology. He received the Linné Medal of the Royal Swedish Academy of Sciences and the Knight in the Royal Order of Vasa.

After World War II, Jarvik traveled to various countries in Europe to present lectures or examine fossils. He also visited Israel, South Africa, China, and, at the age of 84, Miguasha in Quebec, where the famous serially-ground P222 specimen of *Eusthenopteron foordi* was collected in 1925. But he never went to the United States of America.

Jarvik s last paper was put out in 1996. It is a monograph on the skeletal anatomy of *Ichthyostega*, the fourlegged fish from the Upper Devonian sandstone of East Greenland. This largely aquatic tetrapod, many specimens of which were collected by Jarvik himself, is very specialized and not the progenitor of other tetrapods.

Erik Jarvik was a legend in his own time. His career lasted 62 years. Privately, he was extraordinarily approachable and generous. In assemblies he was taciturn, even shy. A colleague at the American Museum of Natural History once defined him as a person who can be silent in seven languages. He passed away in a nursing home on the outskirts of Stockholm, ending a great era in Swedish science. Jarvik & Abizarre conclusions@and their premises remain, however. Who knows, they might be useful to some of our descendants.... (Hans C. Bjerring)

### ALBERT ANDREW POTTER, 1913B1997

The Society lost charter member Albert A. Potter on December 7, 1997, in Cedar Falls, Iowa, the victim of prostate cancer. Albert was born May 12, 1913, upstairs, near Valentine in Cherry County, Nebraska. Al attended a one-room school until eighth grade and graduated from Valentine High School in 1930. Al began his bone-digging career at the age of 16. While riding fence after a *A*gully-washer@he and his brother found a bone that they sent to the University of Nebraska for identification; it turned out to be a new mastodon.

After high school, Al at various odd jobs, including paleontologists visiting the paleontologists recognized to use a shovel (which he choosing exactly the right head). One, Paul McGrew of Museum, stayed at the ranch assistant in the Gordon Creek house. In 1934, Al caught the leader of the first field party Laboratory, American joined the Frick Party at there with McGrew the year Jess and Hugh also worked have said, Awith that first anywhere and done anyfor his help by naming a new

After several seasons with entered the geology program There, he served as an assisthe Nebraska State Museum worked on the family ranch and field worker for various Sand Hills region. These him for his keen eye and ability spent some time selecting. balance and cast of the shovel the University of California and Al worked as his field Quarry just a mile from the attention of Morris Skinner, collecting for the Frick Museum of Natural History. Al Burge Quarry, after collecting before. At various times, brothers for Skinner. Morris is reported to crew, I could have gone thing.@Childs Frick honored Al species Pseudoceras potteri. the Frick Party, Al eventually at the University of Nebraska. tant preparator in Morrill Hall for and one season with the North

Field Party. While at Nebraska, Al met life-long friend Grayson Meade, with whom he collected into the 1990s.

In 1938, following his sophomore year, Al transferred to Chadron State Teachers College and was hired as assistant curator of the fledgling museum there (the museum is no longer extant). Al spent three years developing the collections at Chadron through his own collecting and through contacts made with paleontologists across the country. In the spring of 1941, Al graduated with his Bachelor of Arts degree in biology, and at the same time he taught classes at Chadron. The Chadron Museum was a stop on the First Field Conference of SVP which was held that summer. With the retirement of Eleanor B. Cook that fall, Al took over as curator. More correctly, he was probably custodian, chief preparator, manager of collections, senior field man, etc. He took a break from the museum in late 1941 and joined McGrew as part of an expedition to Honduras and Guatemala for the Field Museum to find faunal evidence for timing of the emergence of the Isthmus of Panama. He again joined McGrew in 1943 at the eruption of Parícutin for the Field Museum.

In 1946, seeing a shortage of funds looming at the college, Al moved to what is now the University of Northern Iowa and began his second careerC science education. The transition was a slow one, as Al returned

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to bone-digging in 1948, joining Meade and Glen Evans at excavations of the Lubbuck Reservoir Archeological site for the Texas Memorial Museum.

After receiving a masters degree in education at the University of Iowa in 1951, and additional postgraduate work in education and zoology at Duke University Marine Lab and the University of Colorado, Al continued teaching at the Malcolm Price Laboratory School in the Department of Teaching at UNI until his retirement as Professor Emeritus in 1978. Al was a progressive educator, who believed that learning occurred best in an open, interactive environment. He believed that to best learn the sciences, students needed to act like scientistsC in a laboratory. While at UNI, nearly every summer was spent in workshops for science education throughout Iowa and in other states. On one such trip to the deep South, he asked his host if they could stop to pick a cotton boll to show his son. The host informed him that men in a pickup had been following them, looking for any excuse to Ado him injury@for trying to improve rural education; not everyone was eager for his teaching expertise. Despite some roadblocks, he was proud of his contributions to education and about the successes of his former students, including two who are presidents of two of Iowas three universities.

Following retirement, Al worked on the family home in Cedar Falls and on fish ponds on land owned along the Niobrara River in Cherry County, Nebraska. He took time to visit many of the old fossil quarries. At his death, two manuscripts on Miocene beavers lay unfinished.

About Family. Al and first wife Mildred Auhl were blessed by the birth of son Donald in 1943. Al married Lois Shefte in 1960, and the couple gave life to son Lee in 1961. Both sons followed careers in scienceC chemistry and geology, respectively.

Those who knew Al remember him as a caring person; he genuinely cared about people, about his family, about science, about the environment, about education, about his students, about his native Nebraska, about his adoptive home along the Cedar River in Iowa. Those people also remember Al for his personable and gregarious nature, his story-telling ability, and his sense of humor. He had remarkable facility with a joke, both theoretical and practical. A favorite: Al was asked by a poll-watcher where he was born. He replied, *AUpstairs.@* 

Al is survived by his wife Lois, UNI professor emeritus, of Cedar Falls; his two sons, Donald and Lee; two grandchildren; and two brothers and two sisters. Al was preceded in death by his parents, his first wife Mildred, and one brother. Memorials should be directed to the Albert A. Potter Scholarship Fund, University of Northern Iowa Foundation, Cedar Falls, Iowa 50614. (Lee S. Potter, with supporting material by Frank Dudek, Glen Evans, Ross Nielson, Marie Skinner, and Loren Toohey)

## SAMUEL P. WELLES, November 9, 1909BAugust 6, 1997

Dr. Samuel P. Welles, Principal Museum Paleontologist of the University of California (Berkeley) Museum of Paleontology died last August after 67 years of service to the Museum. He joined the Museum staff in 1930 as preparator under Dr. W. D. Matthew, shortly after graduating from the University in history and political

science. He was sent to learn collecting techniques under Dr. J. W. Gidley of the U.S. National Museum at the Hagerman, Idaho, horse quarry, where he obtained a sample for the University Museum. The following years he worked with Stirton in the Texas Neogene and Camp in the Permian and Triassic of Arizona and New Mexico. An important early field project was collecting the long-necked plesiosaur skeleton *Hydrotherosaurus alexandrae* and other Cretaceous marine reptiles from the Panoche Hills in Fresno County, California.

In 1938 Sam and Dr. Camp located a rich deposit of labyrinthodont amphibians and fishes in the early Triassic Moenkopi Formation near Meteor Crater, Arizona. Sam described this material and the faunas of other fossil deposits in the Moenkopi from near Holbrook and Cameron. While working in the Cameron area he also discovered the first essentially complete dinosaur skeleton from the early Jurassic of the southwestern United States.

During the 1930s he enrolled in graduate school in addition to his museum work, and earned his doctorate in paleontology in 1940 with a dissertation on Cretaceous plesiosaurs. That fall, Dr. Welles was appointed parttime Lecturer in the Paleontology Department and advanced to Museum Paleontologist. He taught introductory vertebrate paleontology for several years, and gave beginning vertebrate paleontology at times. He continued his research on plesiosaurs and labyrinthodonts, and collaborated closely with Professor Camp on studies of Triassic dicynodont reptiles.

During World War II paleontological research was suspended, and Sam was in charge of radio instruction in the War Training Program of the Electrical Engineering Department. In 1946 he returned to the Museum. He actively participated with Dr. Camp in compiling the *Bibliography of Fossil Vertebrates* during the 1940s and 1950s.

In 1947 the Society of Vertebrate Paleontology conducted a Field Conference on the Triassic of northern Arizona. Starting from St. Johns, they visited the *Placerias* quarry and other sites in the Chinle Formation, then examined outcrops of the Moenkopi near Hunt, where Sam was delighted to discover a new locality for amphibian skulls. Thence the group went on through the Petrified Forest National Monument and Painted Desert to Holbrook. The next day they looked at Moenkopi exposures southwest of Winslow. As the party reassembled to continue to Meteor Crater, Dr. Welles suggested that rather than retrace their tracks over rough roads to Winslow and follow the highway west, that they should take a shortcut, heading more directly across country toward the crater, plainly visible across the flat plain. Bryan Patterson reported later: AThe Welles cutoff, between Moqui Wash and Meteor Crater, gave everyone an intimate acquaintance with the MoenkopiBKaibab contact and with the surface relief of the Kaibab Limestone itself.@After crossing three or four increasingly deep and steep-sided arroyos, two of which required shovel work, the caravan paused by a water tank, and to the consternation of his companions, Sam climbed the windmill to spy out the route ahead. Fortunately they had passed the last real obstacle.

In 1948, Sam attended the International Geological Congress in London, and collected Devonian fishes from the Old Red Sandstone on the Congress excursion to the Welsh Borderlands and Scotland led by D. M. S. Watson, E. I. White, and T. Stanley Westoll.

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During the 1950s he assisted Dr. Camp excavating large Triassic ichthyosaurs near Berlin, Nevada. This locality became Nevadas Ichthyosaur State Park in 1956. In 1982 and 1983 Sam led UREP expeditions to this site to stabilize the in-situ skeletons and install a diagram of the exposed specimens. He was honored by the state of Nevada for his efforts in developing and protecting these fossils.

Other work on marine reptiles included studies of mosasaurs from the Cretaceous of Wyoming (1953), and the Panoche Hills, California (1955), plesiosaurs from Colombia (1954), and collecting plesiosaurs in Montana (1961). He spent 1969B1970 in New Zealand working on plesiosaurs and other marine reptiles.

He continued work on the Moenkopi Triassic with fieldwork at Meteor Crater in 1958 and near Holbrook in 1966. During the 1960s he published descriptions of much of the material he had gathered, especially studies of various labyrinthodont families.

Sam was a skilled and active field collector and a descriptive paleontologist. He was elected President of the Society of Vertebrate Paleontology for 1962, and was awarded Honorary Membership in the Society in 1990.

Following his retirement in 1974, Sam devoted all his efforts to research. In 1977 he restudied the AKayenta@or Tuba City dinosaur *Dilophosaurus*. This project took him to England and Germany for comparisons with various European taxa, and led to several papers on dinosaur structure and relationships. In 1986 he described a long-snouted trematosaur from the Moenkopi. In 1988 he commenced study and description of a plesiosaur from the Sierra Nevada Mountains. He guided a party from the Museum to the Triassic Chinle beds in the Petrified Forest and St. Johns area of Arizona in 1989 which produced new collections from localities worked by Dr. Camp in the 1920s.

After the Museum moved to the Valley Life Sciences Building Sam continued his research at home, coming to the Museum frequently to examine specimens.

Sam Welles was born in Gloucester, Massachusetts. His parents moved to Berkeley when he was four years old and he remained a Berkeleyan for the rest of his life. He married Harriet Giles (ca. 1931); they had three childrenC Paul, John, and Ruth Anne. During the 1930s Harriet frequently accompanied him in the field. After her death in the early 1960s Sam remarried several times. He was an active tennis player for many years, and always in good physical condition for fieldwork. He invested in Berkeley residential real estate during the depression of the 1930s, and with his wife by a later marriage, Doris O. Hampton Welles, provided the U. C. Museum of Paleontology with a generous endowment for research and scholarships. (Joseph T. Gregory, with assistance from William A. Clemens, Edwin H. Colbert, Kevin Padian, and David Smith)

## The Society of Vertebrate Paleontology By-Law on Ethics

AArticle 9. Statement of Ethics.

Several goals for the Society of Vertebrate Paleontology follow from its mission statement (Constitution Article 1): to discover, conserve, and protect vertebrate fossils and to foster the scientific, educational, and personal appreciation and understanding of them by amateur, student, and professional paleontologists, as well as the general public. Fossil vertebrates are usually unique or rare, nonrenewable scientific and educational resources that, along with their accompanying contextual data, constitute part of our natural heritage. They provide data by which the history of vertebrate life on earth may be reconstructed and are one of the primary means of studying evolutionary patterns and processes as well as environmental change.

- \$ It is the reponsibility of vertebrate paleontologists to strive to ensure that vertebrate fossils are collected in a professional manner, which includes the detailed recording of pertinent contextual data (e.g., geographic, stratigraphic, sedimentologic, taphonomic).
- \$ It is the responsibility of vertebrate paleontologists to assist government agencies in the development of management policies and regulations pertinent to the collection of vertebrate fossils, and to comply with those policies and regulations during and after collection. Necessary permits on all lands administered by federal, state, and local governments, whether domestic or foreign, must be obtained from the appropriate agency(ies) before fossil vertebrates are collected. Collecting fossils on private lands must only be done with the landowner<del>s</del> permission.
- \$Fossil vertebrate specimens should be prepared by, or under the supervision of, trained personnel.
- \$ Scientifically significant fossil vertebrate specimens, along with ancillary data, should be curated and accessioned in the collections of repositories charged in perpetuity with conserving fossil vertebrates for scientific study and education (e.g., accredited museums, universities, colleges, and other educational institutions).
- \$ Information about vertebrate fossils and their accompanying data should be disseminated expeditiously to both scientific community and interested general public.
- \$ The barter, sale, or purchase of scientifically significant vertebrate fossils is not condoned unless it brings them into, or keeps them within, a public trust. Any other trade or commerce in

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scientifically significant vertebrate fossils is inconsistent with the foregoing, in that it deprives both the public and professionals of important specimens, which are part of our natural heritage.@

## **SVP Sponsors** As of May 14, 1998

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