

The Compleat Mesoangler

A Newsletter About Mesozoic Fishes

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Giants of Paleoichthyology Remembered

Dr. Bobb Schaeffer (1914-2004)

Remembered by John Maisey

Dr. Bobb Schaeffer, Curator Emeritus in the Department of Paleontology, American Museum of Natural History, New York, passed away June 2, 2004, at the age of 90. A few weeks later his wife Betty also passed away.

Bobb was one of the most prominent and well respected paleontologists of his generation. Official words and condolences have already appeared elsewhere, but a few facts deserve repeating here. Bobb came to the Museum in 1936 as a graduate student of William King Gregory, and in 1946 (after four years of military service) he was hired as an Assistant Curator in Vertebrate Paleontology, beginning more than 40 years at the Museum.

I corresponded with him during the 1970's, but only really got to know him after his retirement. Bobb was really helpful to me when

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Bobb Schaeffer (middle) with Stensiö (L) and Jarvik (R)



Rainer Zangerl (right) collecting Pennsylvanian sharks

Dr. Rainer Zangerl (1912-2004)

Remembered by Hans-Peter Schultze

On December 27th, 2004, Dr. Rainer Zangerl died at the age of 92. Born in Winterthur, Switzerland he attended the University of Zürich and became a student of Dr. Bernhard Peyer, Professor of Paleontology. Peyer introduced Rainer to MiddleTriassic vertebrate localities at the Swiss-Italian boundary (Monte San Giorgio-Besano). Rainer finished his Ph.D. thesis on nothosaurs of Mte San Giorgio in 1935. He immigrated to the US in 1936, because there were no positions available for paleontologists in Switzerland. Alfred Romer helped him get a one-year guest researcher position at Harvard. In 1937 he

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Mesozoic Fishes 4

Fourth International Meeting on Mesozoic Fishes - Systematics, Homology, and Character Definition Miraflores de la Sierra, Madrid, Spain

August 8–13, 2005 (includes arrival and departure days)

Our beloved meeting is fast approaching! For more information, see the Mesozoic Fishes web site (www2.biology.ualberta.ca/wilson.hp/mesofish/) or send an e-mail to Francisco at: francisco.poyato@uam.es.

Bobb Schaeffer Remembered (continued):

I arrived at the museum all those years ago. I remember that he and Malcolm McKenna came out to JFK airport to meet us off the plane and welcome us to this new and strange land. He continued to offer help and advice all the years we were together here (he hung around for almost twelve years!). For me, he was a great guide and mentor, and he and Betty also became my good friends. My one regret is that, despite having so many common professional interests, we never made a collaborative work (although we sometimes talked about it). But we would read each other's manuscripts and would discuss many things during the course of our research. There was always a degree of input and a bond between us that may not be apparent to the reader, but it's there all the same.

Bobb made many important scientific contributions during his long career, but to me his most impressive observations were about evolutionary development. He would sometimes write incredibly perceptive remarks based on the few facts that were available at the time, long before "evo-devo" became a respectable discipline! But his observations are usually buried like truffles, sometimes in the least likely places, so you have to root them out (but when you do, they are delicious!). Sometimes, he would pose questions that he himself could not answer, thereby promoting a real sense of scientific inquiry. I like to imagine how much he would have enjoyed reading about the latest discoveries in this field, which has really taken off in the past few years. So, whenever a new paper comes along, I file it with his old notes and papers partly to provide continuity, but also because I think he deserves it! Some of his old files, labelled "skeleton; development," "gill arches," or "limbs" now contain the latest works on evo-devo, as well as his personal notes and well-thumbed photocopies (with the really important bits neatly annotated in blue, red, or green pencil, saving me the trouble of wading through page after page (thanks, Bobb!)).

He made a tremendous contribution to the AMNH and in many ways he still does, with the legacy of his research, his library (which he donated to the AMNH on his retirement), and most of all his inspiration and encouragement. He is missed very much!

John G. Maisey
American Museum of Natural History
New York, NY

For more about Bobb Schaeffer see SVP
News Bulletin No. 187:pp. 21-22. ■

Rainer Zangerl Remembered (continued):

married his fiancée Anne Kurz from Winterthur in Cambridge, Mass. Anne became a vital support throughout his life at home and in his research. Rainer moved in 1938 to Middlesex University (now Brandeis University) in Waltham, Mass., in 1939 to the University of Detroit, in 1942 to the University of Notre Dame, South Bend, Indiana, and finally in 1945 to the Field Museum of Natural History, Chicago, as Curator of Fossil Reptiles and Amphibians.

His research interest in amphisbaenids and turtles grew during this period. Rainer published an important paper on the methods of comparative anatomy in 1948. He next concentrated his research on fossil turtles. Thus he became the specialist on fossil and extant turtles (last monograph published on an extant sea turtle in 1988). While the turtle research was ongoing, he tried to find a vertebrate Lagerstätte comparable to that of Mte San Giorgio, returning to Europe several times to search other Triassic localities. The search was unsuccessful. Then in a curious way he found an important locality in front of his door. In 1950, Loren Woods, then Curator of (extant) Fishes at the Field Museum, suggested a trip to a quarry of his brother in southern Indiana so that Rainer could explain to him where to look for fossil fish. They discovered many fish remains in the black shales on the floor of the quarry. En route home Rainer discovered a small outcrop rich in fossil fish remains near Mecca, Indiana. That was the beginning of the paleoecological study of Pennsylvanian black shales finished in a monumental monograph in 1963 (Zangerl & Richardson, 1963).

In 1962, Rainer became the departmental Chief Curator (head of the Department of Geology). During that time Dwight Davis, the well-known anatomist at the Field Museum, asked him to help translate Hennig's 1950 book on phylogenetic systematics. Later, with Davis in declining health, Rainer took on the larger part of work. The translation (Hennig, 1966) became the nucleus for all our phylogenetic research today. Rainer then took on another translation project, the unfinished manuscript of a book on tooth histology by his former advisor, B. Peyer (Peyer, 1968).

In addition to these and other projects, Rainer shifted his research interests to the black shale fauna, the main components of which are the well known chondrichthyans, and a group he called "placoderms" (despite the admonition of

Denison, Curator of Fossil Fish at the Field Museum). These are the iniopterygians (Zangerl & Case, 1973), chondrichthyans with pectoral fins placed high on the flanks, and with many other features of the head unknown at the time. Black-shale fishes are flattened and Rainer interpreted them by taking exaggerated stereo-X-ray photos. He was a specialist in X-ray photography. Nevertheless, his interpretation of iniopterygians met with much reservation within the scientific community until the forms were discovered more three-dimensionally preserved at other localities. Rainer started with study of the more common elasmobranchs of the black shales, but even here he got immediately into contradiction with an authority. As participant of the Fourth Nobel Symposium in 1967 honoring E. Stensiö, he published in 1968 a description of a Paleozoic shark (*Holmesella*) and figured bone cells in the base of the scales. T. Ørvig, the authority on paleohistology at the time, had figured the scales of the same species without bone cells (they were retouched away on the photos, because sharks do not have bone tissue - the conventional wisdom at that time). Rainer also participate in the second symposium honoring Stensiö in 1972 in London. By then he was considered the specialist on Paleozoic sharks, presenting shark phylogeny in grade levels (pectoral "design"). With Denison's retirement in 1970, Rainer went from fossil reptiles to become Curator of Fossil Fishes. He compiled the knowledge of the Paleozoic sharks in volume 3A of the Handbook of Paleozoic Ichthyology in 1981 after his retirement in 1974. He had one graduate student, the late Mike Williams, former curator at the Cleveland Museum of Natural History, who studied black shale chondrichthyans.

After Rainer's retirement the Zangerls moved into the house they had built with their own hands over a period of years at Hajji Hollow, 8 miles W of Rockville, Indiana, where the Mecca quarry shales outcrop. His wife did not permit him to excavate there, so they started work at a new locality in the southern part of Indiana near Bethel. This was again a very rich fossil fish Lagerstätte in the Pennsylvanian black shales. The excavated specimens were removed to Hajji Hollow, and then distributed freely to museums and institutions that were interested enough to send someone to pick up material.

Rainer achieved much in his 92 years: he had become a well-known turtle specialist, a great comparative anatomist, a specialist in X-radiography of fossils and their interpretation, a

recognized paleohistologist, and a well-known Paleozoic shark specialist. He made the first great compilation of one Lagerstätte in all of its paleo-ecological aspects. He and E. Yockelson (US National Museum) organized the first of the ongoing North American Paleontological Conventions in Chicago in 1969. He was honored by the Paleontology Society with its Presidential award in 1996, and by the Society of Vertebrate Paleontology with the Romer-Simpson medal in 2003.

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Hans-Peter Schultze
Division of Vertebrate Paleontology
NATURAL HISTORY MUSEUM UNIV KS
1345 JAYHAWK BLVD
LAWRENCE KS 66045-7561 USA
Email: vrtpaleo@ku.edu

For more about Rainer Zangerl see SVP News Bulletin No. 188, pp. 57-60. ■

Mesozoic Fish Tales: News from Readers

Halloween Treat, October 31, 2004, for Großvater Pfeil. Born to Markus Pfeil, son of Friedrich Pfeil, a son, named Maximillan Pfeil. Grandpa Fritz Pfeil is doing well and was showing pictures of his first grandchild to anyone who ventured close to his book booth at the SVP meeting in Denver. ■

New Members:

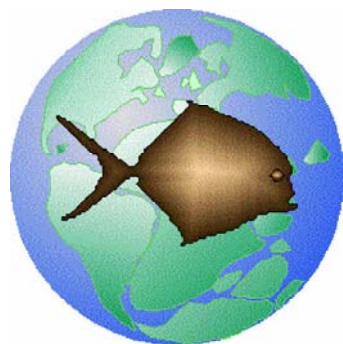
Caine S., Woodhead Croft, New Aberdour, NR, Fraserburgh, Aberdeenshire, AB43 7LQ Scotland, UK. *Tel:* 01346 561 408; *E-mail* caine@gobi99.freeseerve.co.uk

Interests: Working as a professional model maker and painter, specially in extinct fishes.

Carnevale, Dr. Giorgio Dipartimento di Scienze della Terra, Università degli Studi di Pisa, via S. Maria, 53, I-56100 Pisa, Italy *Tel:* 0039-050-2215841; *E-mail* carnevale@dst.unipi.it

Crabtree, C. Ben, Department of Biology, Willamette University, 900 State Street, Salem, Oregon 97301-3930 USA. *Tel:* 1 (503) 370-6474 *E-mail:* bcrabtre@willamette.edu

Interests: My present research interests focus on the teleosts of the Middle and Upper Cretaceous of central Montana. Recent collecting activities in the area around the Judith River in Fergus County of central Montana have yielded



a large number of scales and spines. I have found very little in the literature that would contribute to identification of this material and would enjoy discussions with others regarding

these specimens.

Friedman, Virginia J. 1535 Montebello Dr., Suisun City, California, 94585-3009 USA. *Tel:* 1 (707) 422-8178; *E-mail:* friedmanhvj@aol.com

Interests: I have a general interest in Mesozoic fishes, especially mid-Cretaceous teleosts and Chondrichthyes. During field work, I have encountered a rather diverse marine ichthyofauna including the oldest record of saurodontid fish in North America (Stewart & Friedman, 2001, JVP 21(3):104A.), and also some unusual rostra of Plethodidae Loomis, 1900, ?*Thryptodus* sp., Cretaceous, late Cenomanian, Eagle Ford Group, Britton Formation, Camp Wisdom Member, Dallas–Fort Worth area, USA. Collector: Virginia Friedman, 2002.

González-Rodríguez, Katia. Centro de Investigaciones Biológicas, Instituto de Ciencias Básicas e Ingeniería, Universidad Autónoma del Estado de Hidalgo, Km 4.5 Carretera Pachuca-Tulancingo, Pachuca, Hidalgo, México. *Fax:* +52 (01771) 71 720 00 #2112, *Tel:* +52 (01771) 71 720 00 #6712; *E-mail:* katiag@uaeh.edu.mx

Johnson, Sally. 16 Columbia Drive SE #2, Albuquerque, New Mexico 87106-3661 USA *Tel:* (505) 268-6274; *E-mail:* sbuna@unm.edu; *URL:* www.unm.edu/~sbuna

McAllister, James, Dr. Department of Natural Sciences, Murphy Hall 207B, Dickinson State University, 160 4th Avenue East, Dickinson, North Dakota 58601-5244 USA. *Tel:* 1 (483) 225-7079; *E-mail:* j.mcallister@dickinsonstate.edu

Yu, Xiaobo, Dr. Biological Sciences, Kean University, 1000 Morris Avenue, Union, New Jersey 07083-0411 USA. *Tel:* 1 (908) 737-3666; *E-mail:* xyu@kean.edu; *URL:* www.kean.edu

Zack, Anne. Institute of Geology & Mineralogy, University of Cologne, Zulpicher Straße 49a, 50674 Cologne, Deutschland. *Tel:* 0049(0)221/47 0-3202; *E-mail:* anne.zacke@uni-koeln.de

Interests: I am a Ph.D. student at the Institute of Geology and Mineralogy of the University of

Cologne. I am interested in Mesozoic elasmobranchs, especially Cretaceous sharks. At the moment I am working on a project about the oxygen isotopic composition of fossil sharks' teeth (mainly from the Upper Cretaceous of NW Europe) with the aim to reconstruct palaeo-seawater temperatures. ■

Address Updates:

Arratia, Gloria. Division of Ichthyology, Natural History Museum, University of Kansas, 1345 Jayhawk Blvd., Lawrence, Kansas 66045-7561 USA.

Barba, Gerardo Gonzales. Departamento de Geologia Marina, A. I. de Ciencias del Mar, Universidad Autonoma de Baja California Sur, Apartado postal #19B, C.P. 23080, La Paz, B.C.S., Mexico. *New e-mail:* gerardo@uabcs.mx

Barton, Douglas G. 11 Buckingham Crt., Kingston, Ontario K7K 6V8 Canada.

Tel: 1 (613) 544-7417; *New email:* dougbarton99@hotmail.com

Bryan, Kim. *New e-mail:* kim@bryan.name

Bonde, Niels. Geologisk Institut, Københavns Universitet, Østervoldgade 10, København K, DK 1360 Denmark. *New e-mail:* niels.bonde@mail.tele.dk

Chanet, Bruno. *New e-mail:* bruno.chanet@ac-rennes.fr

Furrer, Dr. Kurator Heinz. Universität Zürich, Paläontologisches Institut und Museum, Karl Schmid-Straße 4, CH-8006 Zürich, Switzerland. *E-mail:* hfurrer@pim.unizh.ch

Hanke, Dr. Gavin. Curator of Vertebrate Zoology, The Royal British Columbia Museum, 675 Belleville Street, Victoria, British Columbia, V8W 9W2 Canada. *Tel:* 1 (250) 952-0479; *E-mail:* ghanke@royalbcmuseum.bc.ca

Hilton, Dr. Eric. Division of Fishes, Department of Zoology, Smithsonian Institution, P.O.



The
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Box 37012, MRC 0159, National Museum of Natural History, Washington, D.C. 20013-7012 USA. *Fax:* 1 (202) 357-2986; *Tel:* (202) 633-1233; *E-mail:* hilton.eric@nmnh.si.edu

Long, John. Museum of Victoria, 11 Nicholson St., Carlton, Victoria 3053 Australia. *Tel:* +61 3 8341 7777; *E-mail:* jl@museum.vic.gov.au

López-Arbarello, Dr. Adriana. Bayerische Staatssammlung für Paläontologie und Geologie, Richard Wagner Str. 10, 80333 München, Germany. *E-mail:* alarbarello@gmx.de

Nolf, Dirk. *New e-mail:* dirk.nolf@mumm.ac.be

Schultze, Dr. Hans-Peter. 2001 Vermont St., Lawrence, Kansas 66046-2971 USA. *E-mail:* vrtpaleo@ku.edu

Smith, Chelsea R. 20 Chapleau Avenue, Apt. 3, Ottawa, Ontario K1M 1E2 Canada. *E-mail:* paleopollywog@hotmail.com



Tyler, James C.
New e-mail:
tyler.jim@nmnh.si.edu

Underwood, Charlie. New e-mail:
c.underwood@bbk.ac.uk

Williams, Dr. Robert R. G. Unit 15, 170
Catheart Street, Ottawa, Ontario L1N 5B9
CANADA. Tel: 613-241-7724; Cell: 613-864-
2772; E-mail: eblue52@hotmail.com ■

Squish Fisch Fiche: Recent Publications

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More than 1,500 references dealing with North American Mesozoic fishes are arranged in groups dealing with fossil assemblages from different geologic intervals and different geographic regions of North America.

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9th Symposium on Mesozoic Terrestrial Ecosystems and Biota

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University of Manchester, June 27 – 29, 2006

A short pre-meeting field trip to either the Cretaceous localities on the Isle of Wight or the Middle Jurassic of the Yorkshire Coast is planned, as is a longer post-meeting field trip including a range of classic Triassic, Jurassic, and Cretaceous deposits in Oxfordshire, the Bristol Channel, Devon, and Dorset.

Key dates

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If you are interested in attending the meeting, please contact either Paul Barrett or Susan Evans
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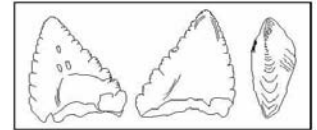
If interested in participating, either as part of the Fisheries Biology Congress in Newfoundland in 2006, or as a separate symposium in Europe in 2008, e-mail Gilles.gilles@savik.geomus.ku.dk or Anne at a.kemp@mailbox.uq.edu.au. ■

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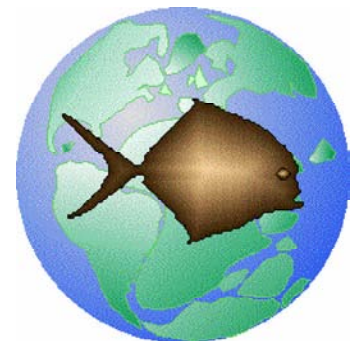
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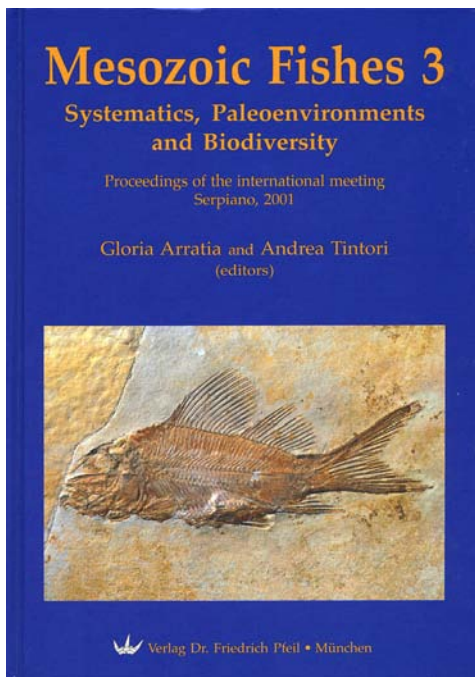
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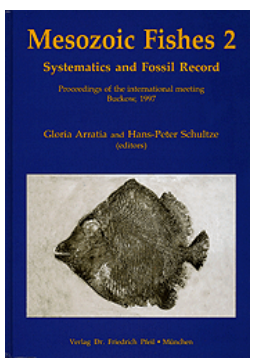




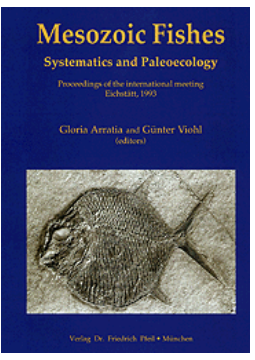
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