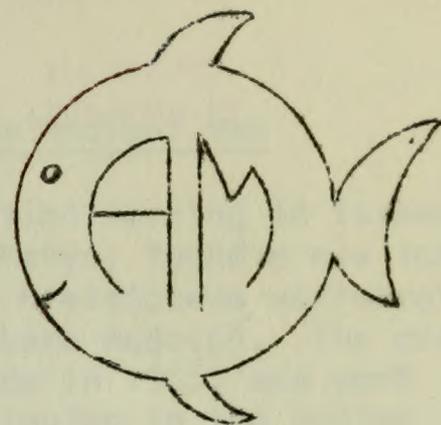


JUN 1 1967

HARVARD
UNIVERSITY

MUSEUM OF COMPARATIVE ZOOLOGY

NEWSLETTER



No. 8
April 1967

From the Director

The Overseer's Visiting Committee has been suggesting for a number of years that an organization be established for the friends of the Museum.

Happily, Mr. Herbert Pratt has taken the initiative, and the groundwork has been laid for such an organization. On April 9, a small dinner party was held in the Agassiz Room at which the nucleus of the Friends of the Agassiz Museum was formed. Mr. Paul Brooks will serve as the group's first president.

We are deeply indebted to the dinner committee, consisting of Mesdames Chandler Bigelow, Samuel H. Hallowell, Thomas S. Lamont, Roy E. Larsen, Gerrish Milliken, Herbert W. Pratt, Gordon C. Prince, and Messrs. Montgomery Bradley, Paul Brooks, Thomas D. Cabot, David Emerson, Robert G. Goelet, Henry Lyman and John O. Stubbs.

It is our hope that through the Friends there can once again be established a close relationship with the community reminiscent of that which existed and was such an integral and important part of the Museum's life in the days of Louis Agassiz.

There is new and interesting activity to report about and from the Concord Field Station. We have raised \$117,000

of the total \$150,000 needed to match that given by the Ford Foundation for land acquisition, and at this time over 180 acres have been purchased. Further, there is now a caretaker in residence, and one of our graduate students is using the laboratory and surrounding acreage to study bird behavior. In addition, students in Professor G. L. Clarke's course, Principles of Ecology, are using Bateman's Pond for their studies in fresh water ecology.

--Ernst Mayr

From Dr. Simpson

After July 1, 1967, Dr. George G. Simpson, Alexander Agassiz Professor of Vertebrate Paleontology, will be on half time. For reasons of health, Dr. Simpson wants to spend more time in the Southwest, and especially at his home in New Mexico. He says that the University of Arizona has kindly given him office space, and that he can be reached by mail at the following address: Department of Geology, University of Arizona, Tucson, Arizona, 85721. We wish him well, and hope to see him around now and then.

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New Ancient ManNew Ancient Ants

Drs. E. O. Wilson, W. L. Brown and F. M. Carpenter are studying two beautifully preserved worker ants in amber dating from the middle of the upper Cretaceous. These are the first social insects known from the Mesozoic and the first undoubted Aculeata (ants, wasps, or bees) known from that era. The specimens present an interesting mixture of ant-like and wasp-like features and suggest a somewhat different phylogeny of the major groups of ants than had previously been proposed. They may represent a link between the tiphioid wasps and the elusive Nothomyrmecia, which is regarded as the probable ancestor of the bulldog ants of Australia. Nothomyrmecia is known from two specimens collected by an amateur in an obscure locality in western Australia; it has never been rediscovered. The two Cretaceous fossils were also collected by amateur workers--in this case in a not-so-obscure locality in New Jersey. Needless to say, field trips are being planned to this area in hope of finding further specimens of this ant and perhaps other ants and the wasp-like ancestors from which they may have evolved. In the meantime, Robert Taylor, former graduate student and post-doctoral fellow, now at Canberra, hopes to launch a further search for Nothomyrmecia and hopefully to learn something of the biology of that "living fossil."

An MCZ expedition working in Turkana, in northwest Kenya, found a new locality for early Pleistocene vertebrates southwest of Lake Rudolph. The discovery was made in 1965, and work has been continuing in the region since that time. A rather rich fauna was obtained, which indicates an age in the early Pleistocene antedating Bed I at Olduvai Gorge. Among the fossils is the distal end of a hominid humerus. Detailed anatomical and metrical studies of this fragment carried out by Professor Bryan Patterson and Professor W. W. Howells of the Peabody Museum reveal that not only does the specimen represent a member of the human family but that it is closer to modern man than it is to early Pleistocene Paranthropus. This suggests that the specimen could be referable to Australopithecus, also of early Pleistocene, which is closer to man than its contemporary. Unfortunately, the comparable part, i.e., the distal end of the humerus, is lacking in the latter.

The fossil-bearing deposits in the region are capped by a lava flow, and a potassium/argon dating has been obtained from samples of the lava. It is 2.5 plus or minus 0.2 million years, thus appreciably older than dates obtained at Olduvai. This date is in agreement with the general aspect of the fauna and indicates that in this humeral fragment we have the earliest member of the human family thus far found.

In the Field

One of the Museum's largest expeditions in recent years has just returned from a ten-day trip to Panama, where assorted invertebrates, algae, but mainly fish were studied and collected from both coasts and from Gatun Lake and its tributaries. The group consisted of 21 people, 9 of whom were professional biologists (including Dr. Giles Mead, Curator of Fishes, who was the leader), 4 graduate students, and 9 undergraduates. The host was Dr. Ira Rubinoff, a former student of Dr. Mead's and Director of the Smithsonian Tropical Research Station, which has its main laboratory in Balboa. The trip came about because of the fact that a fresh water canal is to be put through the area--thus creating a unique situation for studying resulting changes. This trip was the "before" survey.

Dr. Ruth Turner, Research Associate in Malacology, traveled to west Africa to join the Atlantis II for dredging work across the Atlantic Ocean from Sénégal, Dakar, to Recife, Brazil. Miss Elaine Kelley, secretary to Dr. Mead, then joined the Atlantis at Recife to collect.

Mr. Merrill Foster, graduate student in Invertebrate Paleontology, returned in early March from the Antarctic with approximately 9,000 specimens (representing at least 10 different species) of brachiopods. This is the largest number ever collected on an oceanographic expedition, and greatly increases the known geographic range of a number of species. While waiting in New Zealand for military transportation home, Mr. Foster visited the Canterbury University Museum, spent a day collecting fossil brachiopods from the Tertiary strata at Oamaru, and spent an hour examining "the rather famous brachiopod tide pool at Lyttleton Harbor."

Dr. Charles P. Lyman, Research Associate in Mammalogy, and Mrs. Lyman returned in mid-March from a month's trip to Uganda, Kenya and Tanganyika. The main purpose of the trip was to visit a former student, Dr. Charles R. Taylor, who is in Africa for four years on an NIH grant studying water metabolism of various ungulates, and trying to get a better picture of how these animals meet the physiological problems of high temperatures, low humidity and aridity all at the same time. Some of the wild animals studied have been Grant's and Thompson's gazelles, wildebeest or gnu (seemingly the worst adapted, yet the most prolific of horned ungulates), buffalo, Grevy's zebra (which lives in the driest part of Kenya yet has a kidney no better than an ordinary horse for concentrating urine), camel, eland and the savage oryx. Some of the local domestic animals have been studied also for comparison. The Lymans traveled 800 miles by plane and 5,400 miles by land-rover, and visited many of the National Parks, including Nairobi, Lake Manyara in Tanganyika, Ngorongora Crater near Olduvai Gorge, Serengeti near Lake Victoria, Queen Elizabeth on Lake Albert, and Tsavo (with lots of rhinos and elephants taking mud baths). Once they were semi-charged by a rhino, and another time their land-rover was hit by an elephant--to mention only a few of their adventures!

Dr. Alfred S. Romer, with Mrs. Romer as "assistant", spent two weeks in early March continuing work in the straightening out of the stratigraphy of the Permian beds of his Texas collecting area. This is now complete except for a small but difficult area close to the Oklahoma border.

More Field Notes

Dr. Howard E. Evans, accompanied by his family--all ardent collectors--spent February collecting insects (mainly wasps, of course) in Puerto Rico and the U.S. Virgin Islands. The biological station of the University of Puerto Rico, where the Evanses spent two weeks, is located in the mountains in a tropical rain forest, and proved to be a unique (delightful but damp) experience.

Mr. Tomislav Munetic, MCZ Librarian, took an extended trip to Europe last fall to visit the International Book Fair in Frankfurt, Germany, and to visit a number of zoological and other libraries across the continent.

Mr. George Gorman, a graduate student in Herpetology, has just returned from Cuba, where he was doing both laboratory and field studies for his research on island evolution in lizards of the genus Anolis. He did his cytological work in the Genetics unit of the Institute of Biology of the Academy of Sciences in Havana, and was provided with all of the standard equipment. For his field trips he had the use of a jeep, and the able assistance of two native biologists, Orlando Garrido of the Institute, and Miguel Jaime, Director of the Museo "Felipe Poey" El Capitolio in Havana. Mr. Gorman has much more of interest to say about his trip, as well as about the active work of Cuban biologists, and of their "desire to re-establish information flow with American scientists." If you are interested in further information, may we suggest that you contact Mr. Gorman directly.

Research Notes

A continuing report on Dr. Romer's Argentine fossil reptiles: they arrived safely in Cambridge in December, and Mr. A. D. Lewis and his crew are "busily at work on the collection, which includes perhaps 200 or so skulls and much post-cranial material." Preparation and description will take several years.

Dr. Barry P. Moore, a member of the staff of the S.S.I.R.O., Division of Entomology, Canberra, Australia, is here for a year as a Research Fellow to help set up a new insect-chemistry laboratory in the Biological Laboratories, but occasionally he can be found working in the insect collections at the Museum. His major research has been in the biology and biochemistry of Australian insects, particularly termites and carabid beetles. And Mrs. Moore is helping in the identification of Australian plants at the Herbarium.

Dr. Kenneth Boss reports that a large collection of beautiful tree snails of the genus Liguus from Florida was given to the Department of Mollusks by Mrs. Henry G. Frampton.

Since returning from the West Indies, Dr. A. M. Chickering, Associate in Arachnology, has been working over his entire 1966 collection and is "about ready to begin the completion of his monograph on the Oonopidae of Panama and the West Indies."

Dr. John Lawrence has an interesting "new" source of specimens for his studies on fungus-inhabiting beetles. He spent two weeks working in the National Fungus Collections at Beltsville, Maryland, and "by examining these fungi for old beetle infestations, I was able to collect several thousand Ciidae from China, Ecuador, Australia, and other places."

Lectures Here and There

Dr. Henry F. Howden, Alexander Agassiz Visiting Lecturer, gave a series of three lectures during March on the subject of: "Insects and Zoogeography, Exemplified by the Biology and Distribution of Scarabaeid Beetles in North America." Dr. Howden is Research Scientist at the Entomological Research Institute in the Department of Agriculture in Ottawa, Canada.

Dr. William J. Clench gave a lecture to the Boston Malacological Club and to the Connecticut Valley Shell Club, while Dr. Kenneth Boss went to the American Museum of Natural History to talk before the New York Shell Club.

Dr. Ruth Turner lectured in São Paulo before going on to work at the laboratory of the University of Puerto Rico at Mayaguez.

Dr. H. E. Evans, after giving two lectures in a colloquium on animal behavior at the University of Texas in Austin in late March, went on to Michigan State University in East Lansing, where, as Distinguished Visiting Professor, he is giving a course on Hymenoptera. He will be there until the end of May.

Dr. A. S. Romer says that "this spring I am on occasion lecturing in a variety of places, ranging from North Carolina to British Columbia." He is also serving as Board Chairman of the AAAS, and at the New York meetings next Christmas, "will give a farewell lecture and then disappear into outer darkness." A likely story!

Dr. Tilly Edinger says that one of the reasons she enjoys attending the meetings of the Society of Vertebrate Paleontology is that she gets to see so many old friends, including the Romers.

Publication Notes

On the twenty-fourth of this month the National Academy of Sciences will award its Daniel Giraud Elliot Medal to Dr. Ernst Mayr. This medal (and honorarium) was founded sixty years ago, and has been given annually for meritorious publications in zoology or paleontology. Dr. Mayr is being cited for his Animal Species and Evolution.

Dr. Romer's Vertebrate Paleontology finally appeared in December, and he is "now writing a short companion volume--probably to be a paperback--discussing and commenting on various problems touched on in the textbook."

Dr. Mayr says that Volume 12 of Peter's Checklist of the Birds of the World is in the printer's hands.

Dr. Herbert Levi and Mrs. Levi are translating Alfred Kaestner's Lehrbuch der Speziellen Zoologie. The English version, to be called Invertebrate Zoology, is being published by Wiley Interscience, and the first volume (on sponges to mollusks and annelids) should be out in late spring or early summer. The manuscript for the second volume (arachnids, millepedes, and other miscellaneous arthropod relatives) has just been finished, and the third volume (crustaceans), to be written with Dr. William Newman, will be started this summer. The fourth volume (echinoderms) has as yet not been thought about.

Dr. P. J. Darlington has finished his manuscript for Part III of "The Carabid Beetles of New Guinea". This completes the taxonomic descriptions, and Part IV will contain the discussion and summary. This is being published in the MCZ Bulletin.

Dr. Boss reports that one number of Johnsonia on the subfamily Tellininae in the western Atlantic Ocean has been published and three numbers of Occasional Papers on Mollusks have appeared.

Additions and Subtractions

Dr. Giles W. Mead, Curator of Fishes, was married to Dr. Sylvia A. Earle in Harvard's Appleton Chapel on December 12, 1966, and their reception was held in the Museum's Agassiz Room. Mrs. Mead is a specialist in algae and will be an Associate at the Herbarium. Meanwhile, says Dr. Mead, "the Fish Department is pleased to report that its collection of marine plants now exceeds in volume that of the Farlow Herbarium."

Two new corporation appointments are: Dr. Ernst Mayr to the Faculty of the Peabody Museum, and Mrs. Marjorie Sturm as Administrative Assistant to the Director of the MCZ.

Dr. and Mrs. Guy Bush (formerly in Entomology and now at the University of Texas) have adopted a little girl, Lisa, and are now house-hunting in the suburbs of Austin.

Dr. Ernst Mayr has been made a member of the Department of History of Science, and he notes that Dr. E. I. Mendelsohn of that department is to edit a new journal devoted solely to the history of biology.

Since the last Newsletter, four students have received their doctorates: Vida Kenk y Blanco, on her thesis entitled "A Revision of Brachidontes (Mollusca: Bivalvia)"; Vassilios Nafpaktitis, "Taxonomy and Distribution of the Lantern-fishes, Genera Lobianchia and Diaphus, in the North Atlantic"; Charles Porter, "A Systematic Revision of the South American Species of the Genus Trachysphyrus Haliday (Hymenoptera: Ichneumonidae)"; and Francois Vuilleumier, "Speciation in High Andean Birds".

Postdoctoral Fellows

During this spring semester, there are three postdoctoral fellows in residence: Dr. Mary Jane West in Entomology, Dr. Richard Chesher in Invertebrate Zoology, and Dr. Heinrich Ristedt in Invertebrate Paleontology.

Dr. Ristedt is from Bonn, Germany, and is interested in the growth stages of early Paleozoic nautiloids. He is here working on these fossil cephalopods in the Museum's large Bohemian collection of fossil invertebrates.

Dr. Chesher was previously at the Institute of Marine Science in Miami, and is here to make a systematic and evolutionary study of our Antarctic echinoids, using biometrical and ecological analysis. He has been on expeditions to various places, including Panama, Africa, Europe and the Bahamas (he likes tropical forms, too!). Furthermore, he has had ten years of experience as a professional diver, and is interested in underwater photography. He will be making a deep dive (probably down to 450 feet) for Smithsonian sometime during this month.

Dr. West came from the University of Michigan at Ann Arbor, where she worked on the social biology of polistine wasps. Here she will continue in this field--studying taxonomy of social wasps and evolution of social behavior. Concurrently with her wasp studies, she is preparing a biographical sketch of a remarkable, self-trained man, Mr. Phil Rau, who, with his wife, provided some excellent observation studies for understanding the complex behavior of wasps. She hopes to publish this sketch along with some previously unpublished Rau papers, and a complete Rau bibliography.

Library Continues Changes

In order to utilize its space more efficiently and provide more room for future growth, the MCZ Library continues its major project of shifting books. Part of this change includes the removal of rare and valuable books, and all journals published before 1850, from the open shelves to locked areas, where they will be available upon request. And the importance of this latter project was demonstrated rather dramatically when an unknown copy of the extremely rare first edition of Linne's Systema naturae (valued at more than \$10,000) was discovered in the Library.

Two new services which the Library hopes to have available soon are: (1) the card catalogue published in book form; and (2) a listing by title of all the serials available in the Library.

Mr. Munetic also noted that there has been a long tradition of gifts of books by friends of the Library, and that "this is a tradition we would like to uphold."

Agassiz Club

Last fall the Agassiz Club was formed by a group of graduate students at the Museum. The purpose of the Club was "to promote scientific discussions among students working in different fields, who have nevertheless common problems and interests." Consequently, seven short, informal seminars have been held with members presenting "aspects of their research or other material on which they have worked, or in which they have a special interest."

Anyone interested in more details, or with any suggestions as to program, may contact Mr. Roger Thomas in Invertebrate Paleontology.

Academic Notes

Various and varied courses have been keeping staff and students busy (to say nothing of coke machine suppliers!) during this spring semester. A new course (Biology 10b) in Biology of the Vertebrates is under the direction of Dr. E. E. Williams, with some of the lectures being given by other Museum personnel as the subject matter touches on their special interests. Dr. Giles Mead is giving a course in Biology of the Fishes, and Dr. H. B. Fell in Biology of Marine Invertebrates. Dr. John Lawrence has an informal seminar on beetle classification.

Editorial

We cannot refrain from making a few editorial comments at various places throughout this Letter, but we offer to all of you, who have ever struggled with the International Rules of Zoological Nomenclature, the following news item without further comment.

On February 27, 1967, Mr. Thomas M. Pelly (R-Wash.) spoke briefly on the House floor about the concern within the fishing industry of the possible confusion in the public mind between salmon, Salmonella and salmonellosis. He explained that the genus of bacteria was named by a man named Salmon, and has no relationship to the "nutritious and wholesome anadromous fish called salmon." He then introduced H.Con.Res. 242 to express the sense of the Congress that the terms "Salmonella" and salmonellosis" should not be used in reference to any genus of bacteria or bacterially-caused disease.

--Mary Alice Evans (Mrs. H. E.)

GONE BUT NOT FORGOTTEN100 Years Ago

The Annual Report for 1867 was not as long as most, but did mention the need of the Museum for more space, more competent curators, and more income (at least a doubling of the current \$10,000). But the Director, Louis Agassiz, was never at a complete loss of words, and after announcing that he had been fortunate in persuading Dr. H. Hagen of Königsberg to come and take over the Department of Entomology, he went on to say:

"The farther I advance in the work of organizing the Museum as a systematic representation of the present state of our knowledge of the animal kingdom, the more am I satisfied of the deficiencies in the present mode of arranging public collections; the more do I see how little we reproduce in our museums the most important results of modern science. The mere accumulation in systematic order of select specimens for given classes, families, genera, etc., has after all little intellectual value, and does not in any way represent the progress of our investigations. Zoology, comparative anatomy, embryology and paleontology are only parts of one great system, combining under different heads our knowledge of the affinities, the structure, the mode of growth and the order of succession of animals through all times and in their past and present distribution upon the surface of the globe. In order to represent these different aspects of the subject in their connection with one another, it is necessary to combine whole specimens of living animals, anatomical preparations, embryological series and fossil remains in the same case, or on the same shelf, in such intelligent relation that they shall illustrate each other...."

50 Years Ago

In the Annual Report for 1917-1918, the Director, Samuel Henshaw, wrote:

"Dr. H. B. Bigelow's services for the government of the United States gave him little time for his Museum duties as Curator of Coelenterates."

25 Years Ago

Dr. Thomas Barbour, in his Report for 1941-1942, wrote:

"Mrs. Myvanwy Dick...has joined the group of volunteer workers here and her artistic abilities have been greatly appreciated as she has illustrated many of my papers during the year and her curatorial work in the Fish Department has been diligent and intelligent. It is she who, in great part, has segregated the fish types, although I suspect there are a great many more of them still to be found. Nevertheless some 2,000 have already been placed where, in case of necessity, they could be moved promptly and easily."

Dr. Barbour also mentioned that he had been asked by the trustees of the Peabody Museum in Salem to supervise the re-installation of their natural history collections from Essex County, and to sort and dispose of other botanical and zoological materials which were of no further use to the Museum. Then he continued: "A few interesting and valuable specimens have turned up during the course of this work but it was not unusual to find a package, carefully tied up, covered with soot, which, when dusted off, revealed the superscription, 'Please do not disturb these specimens. C. Cooke, 1857.' It is seldom that a request of this sort is respected for so long a period of time."

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