

# SCIENCE IN FIELD AND LABORATORY

Expeditions—American Museum Activities—Education— Meetings of Societies—New Publications

# EDITED BY A. KATHERINE BERGER

# EXPEDITIONS

TAHITI.—Mr. Roswell Miller and Dr. H. L. Shapiro have just returned from a successful trip to Tahiti. During their month's stay at this island Doctor Shapiro carried on investigations in physical anthropology among the natives, and Mr. Miller obtained motion pictures in color of the coral-reef life of the sea floor.

THE 1933 DINOSAUR EXPEDITION OF THE AMERICAN MUSEUM.—Owing to shortage of funds, this expedition was reduced in personnel and scope. Mr. Barnum Brown left New York for Montana, Wyoming, and South Dakota, late in the summer and was joined at Billings, Montana, by Darwin Harbicht who assisted him in the field.

The main object this season was to remove the heavy sandstone covering two large herbivorous dinosaur skeletons, found in the Big Horn Basin near Greybull, Wyoming, in 1932. This work was accomplished and the remainder of the season devoted to reworking the lower Cretaceous beds on the Crow Indian Reservation and exploration for new fossil territory. In a new locality near Harlowton, Montana, several new types of invertebrates and dinosaurs were discovered.

Natural History is expecting to publish a detailed account of this find in a later issue.

#### BIRDS

THE "NEW FOREST" BIRD GROUP AT THE AMERICAN MUSEUM.—Bird Life in England—a scene of great beauty in a primeval forest set aside by William the Conqueror as his hunting

ground, and ever since preserved by the Crown,— New Forest,—this is the setting of the seventh and one of the loveliest of a series of groups designed to depict bird life in the major faunal areas of the globe. It is the gift of Mrs. Carll Tucker, and is dedicated to the memory of the late Lord Grey of Fallodon.

The formal unveiling of the group took place in the Hall of the Birds of the World on the second floor of the Museum at 4 o'clock, Monday, October 16, with President F. Trubee Davison presiding. The British Government was represented by Consul General Gerald Campbell, and addresses were made by Prof. Henry Fairfield Osborn, Dr. Frank M. Chapman, under whose direction the group was assembled and prepared, and Director George H. Sherwood. Mr. Francis L. Jaques assisted with the unveiling.

Considerable historic interest is centered in this bird group because, when choice was being made of a locale for the birds of northern Europe, the selection settled upon that place in England that seemed to offer the greatest interest to American bird lovers,—the route covered by Viscount Grey and Col. Theodore Roosevelt almost a generation ago when Roosevelt visited England to study its birds. This included the Valley of Itchin and the New Forest.

Before leaving the White House in March, 1909, President Roosevelt asked Lord Bryce, then British Ambassador, to arrange to have some English ornithologist take him afield when he, in June, 1910, would visit England on his way home from Africa. This desire was communicated to

Viscount Grey, then Sir Edward, Secretary of Foreign Affairs. He replied that he himself would serve as Colonel Roosevelt's guide.

In June, 1910, these two famous naturalists went to Tichborne, walked to the Itchin, which they followed to the environs of Winchester. Then they motored to the New Forest which they crossed on foot to Forest Park Inn.

It is a spot on this latter part of their walk that is perpetuated in the Museum's group. Viscount Grey's interest in the American Museum and its plans is best shown by the fact that when the artist, Mr. F. L. Jaques, and Doctor Chapman went to England in 1932, he personally guided them over the path he had taken with Mr. Roosevelt. When they finally, with Viscount Grey's coöperation, selected the setting for the habitat group, Mr. Jaques not only made a faithful reproduction of it, but samples were taken of leaves, branches, plants, and flowers, so that the reconstructed material would be not only lifelike but also accurate.

Many distinguished ornithologists were present at the ceremony of the unveiling of the group, which is now open to the public.

#### EDUCATION

THE AMERCIAN INSTITUTE'S CONTRIBUTION TO THE SCIENTISTS OF THE FUTURE.—Part of the scientific educational program of the Junior Science Clubs of the American Institute is a

series of special workshop courses with which the American Museum and the Museum of Science and Industry in New York City have been cooperating. In these courses the children have been taken behind the scenes at the two museums, and taught how to make their own exhibits.

Mr. William Carr, director of the Nature Trails and Trailside Museum which are maintained by the American Museum at Bear Mountain, New York, conducted two groups of biology clubs on "The Technique of Making Habitat Groups" and "Nature Handieraft."

THE JUNIOR ASTRONOMY CLUB, which is sponsored by the American Museum's departments of astronomy and education, has established a lecture bureau which offers to provide junior speakers on astronomy to any organization within a moderate radius of New York City.

# FISHES

A thresher shark (Alopias vulpes), 13 feet 4 inches long, caught off Manasquan, New Jersey, has been presented to the American Museum by Petrosino Brothers of the Washington Market. The shark was on exhibit at the market for several days.

This swift shark is considered a heavy-bodied derivative of the mackerel shark group, but it has no near relatives and is usually put into a family by itself. The whip tail, which in this



THE NEW HABITAT GROUP OF NORTH EUROPEAN BIRDS

A section of the moor-fringed New Forest, near Southampton, England, has been faithfully reproduced in this new group recently opened to the public at the American Museum. It contains no less than sixty species of North European birds, ranging from the tiny gold-crest to the tawny owl



THE MUSÉE VOLCANOLOGIQUE AT ST. PIERRE, MARTINIQUE

This unique Museum was opened to the public last August. St. Pierre is now an open port directly accessible to all boats, and its new volcano museum (upper right) adds considerable interest to this already celebrated spot in the West Indies

specimen measured 7 feet 2 inches, is used for rounding up the school of fishes upon which it feeds.

The shark has been skeletonized and added to the study collection, with a possible view to exhibiting this skeleton in the future. There are two mounts of the fish in the Hall of Fishes of the World.—F. LAMONTE.

#### HISTORY OF THE EARTH

Volcanological and Historical Museum AT ST. PIERRE, MARTINIQUE.-The volcano museum of St. Pierre was opened to visitors on August 27 last. Founded by Frank A. Perret, the American volcanologist, by the aid of American and local contributions, this institution provides exactly what has hitherto been lacking at this historic spot—a collection of the marvellously interesting relics dug from the buried city; numberless specimens of volcanic bombs, ash, and lava forms in great variety from Mount Pelée and all the volcanoes studied during thirty years of intensive volcanological research, as well as a unique series of photographic enlargements illustrating not only the fearful fire-avalanches of Mt. Pelée but virtually every type of volcanic phenomenon.

The catastrophe which overwhelmed St. Pierre in 1902 is recorded in views of the town before and after the disaster, and by the effects of the volcanic blast in melting glass and metal objects, and the carbonizing of bread, spaghetti, coffee, books, cloth, fruit, etc.

The museum is situated on the main street, a few minutes' walk from the boat landing, and commands a magnificent view over the new town, the roadstead, and the imposing new dome of the great volcano, still smoking after the recent eruption.

Admission to the museum is ten cents (2 francs) on ordinary days, and fifteen cents (3 francs) on Sundays and holidays. Children 5 cents. The museum is open every day in the year. Postcards, photographs, and relics from the ruins are on sale.

Readers of Natural History will recall the article "The Volcano Museum on Mount Pelée" contributed by Dr. C. A. Reeds to the January-February issue, 1933, which was so beautifully illustrated with photographs taken by Mr. Frank A. Perret, director of the new museum.

#### MAMMALS

THE SONDAICUS RHINOCEROS.—Never in the whole zoölogical history of the American Museum has there been more persistent, intelligent, and generous endeavor to secure a certain rare and nearly extinct species for the collections than that of Mr. Arthur S. Vernay in his six years' effort to add the *Rhinoceros sondaicus* to his remarkable Asiatic Hall collection.

While his last expedition failed to secure the large Sondaicus bull which he was expecting to find according to all recent reports, Major G. S. Rowley, who conducted the expedition in the absence of Mr. Vernay, was fortunate in obtaining another specimen which comes in the nature of a consolation prize, namely, a fine bull of Rhinoceros (Dicororhinus) sumatrensis, the twohorned rhinoceros of Sumatra, which is also becoming one of the greatest rarities of modern zoölogy. This specimen was shot on June 20, 1933, at Sungei Bugis, Bernam River, Selangor, Federated Malay States, and was received at the American Museum September 19, 1933. It will form a splendid companion to the female sumatrensis which fell to the rifle of Mr. Vernay on May 2, 1924, and is now in one of the cases of the



Mr. Vernay writes, September 7, 1933, that this particular bull is preented by His Highness the Sultan of Selangor, who has previously been most kind in helping us with the Sondaicus rhinoceros. There is still a chance of getting the Sondaicus rhinoceros from Selangor.

At the November meeting of the Trustees, Major Guy S. Rowley was elected an Honorary Member of the American Museum in recognition of his great service in spending three months in the search for the Sondaicus rhinoceros, a period of extreme hardship ending in great disappointment. In Mr. Vernay's words

No one could have been more conscientious and keen than he has been, and it is through his help that we have left Malaya, for the time being, with every evidence of kind coperation between the Museum and the Resident.

In the course of preparing for the capture of the rare *Rhinoceros sondaicus* Mr. Vernay has studied the feet of the three types of Indian rhinoceroses likely to be encountered by the hunter, and has drawings and photographs of the tracks of the



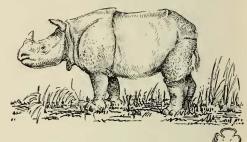
pattern of the track made by each

species varied in a characteristic

fashion from that of its relatives.

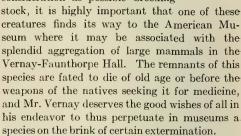
In assembling this data Mr. Vernay had sketches of the feet of mounted specimens in the American Museum and in the Museum of Comparative Zoology at Cambridge; and obtained prints of actual tracks from a rhinoceros in the Bronx Zoological Park which obligingly walked across a prepared surface. The only mounted specimen of the Sonda rhinoceros available for this study at the time Mr. Vernay was seeking to distinguish between the footprints, was the specimen in the Museum at Cambridge, but later he secured sketches and studies of tracks made by the wild animals of known identity in southern Asia.

Assisted by this ability to identify the rhinoceros by its tracks, Mr. Vernay brought to a



INDIAN RHINOCEROS

successful conclusion his hunt of 1932 for that specimen of the Sonda rhinoceros which was donated to the British Museum. Apparently there are but very few remaining specimens of this rhinoceros in existence, and since the greater number of these, if not all, are scattered, solitary animals, living under conditions which remove them from consideration as possible breeding



As on the expedition which secured the specimen for the British Museum, Mr. Vernay's party was equipped to make the fullest possible use of any specimens taken, for not only was a skin and complete skeleton preserved on that occasion, but also all of the external and internal parasites and such parts of the soft anatomy as merited special study. Incidentally, while the question of parasites might seem to the layman of

small moment to any other than the creature carrying them, often significant side lights are shed upon the question of origin by the species of parasites living upon the form in question. In other words, if it were possible to know something of the parasites which lived upon the mammals known to us only as fossils, it would conceivably be much easier to restore the branches of the family trees. The parasites of the Sonda rhinoceros were acquired from the associates of some remote epoch and are an index to the company it kept. It is fortunate that Mr. Vernay collected a representation of these before the extermination of the host.

THE GIANT SABLE ANTELOPE GROUP IN THE AMERICAN MUSEUM.—In Mr. Albert E. Butler's article in the September-October number of NATURAL HISTORY, "Transplanting Africa," he featured the group of giant sable antelope, which is to be one of the attractions in the new Akeley Hall of African Mammals. Mr. Butler's account of the work in the field, collecting accessory material and making background studies for this group, was necessarily brief because of space limitations. It is impossible to think of the giant sable of Western Africa without recalling Mr. H. F. Varian, whose name has been inseparably linked with that of the antelope which is known to science as Hippotragus niger variani.

The story of the giant sable is an interesting side light on the important part played by Mr. Varian in the study and development of Angola, and the intimate relationship between the history of the animal and the activities of the man places more than the customary significance upon the scientific name of the antelope. It seems most appropriate that the splendid group which Mr. Arthur S. Vernay has so generously collected and donated to the Museum will stand as a monument both to him and to Mr. H. F. Varian.

Mr. Varian's interest in the American Museum group of giant sable antelope goes back to the very beginning, and it was his generous coöperation with Mr. Vernay, when he used his influence and knowledge to assist in every way, which insured a successful outcome and the securing of the animals themselves. When Mr. Butler and Mr. Rosenkranz arrived in Angola, he again offered his services and not only aided in the various official matters of entry into the country, but also kindly placed at their disposal the facilities of his home at Lobito and his home at Huamba, and drove them in his own car the 175 miles to Quanza.

Mr. Butler has written of "transplanting Africa," but, in the case of Angola, the American Museum has acquired more than a biological and geographical accession. The Museum has established an association with a personality, and it is fitting that one of the finest of Africa's superb antelopes stands as a tribute to Mr. H. F. Varian.

#### HYDE MEMORIAL PARK

ON November 15, 1933, Mrs. B. T. B. Hyde, on behalf of herself and her sister-in-law, Miss Mabel L. Hyde of New York, presented to the State of New Mexico, a 350-acre park in Little Tesuque Canyon. This area is to be known as Hyde Memorial Park, "to perpetuate and carry out the ideals and purposes of 'Uncle Bennie,' who acquired the land as mountain headquarters for his Boys' Nature Foundation."

Mr. Hvde, who died in an automobile accident in July of this year, had been a Patron of the American Museum of Natural History for many years. It is fitting that his Memorial should consist of an out-of-doors area for the enjoyment of the people, for, during the last years of his life, Mr. Hyde's principal interest was in encouraging people to become familiar with the out-of-doors .-- W. H. C.

#### OLIVER CUMMINGS FARRINGTON

OCTOR Oliver Cummings Farrington, one of the world's leading authorities on meteorites, gems, and gem minerals, died on November 2 at the age of 69 years. Doctor Farrington had been Dean of the Field Museum for many years, having joined its staff a few months after it was founded. He had been curator of geology since 1894. During his notable career, Doctor Farrington served on the faculty of Yale University, lectured at the University of Chicago, and for a time was connected with the United States National Museum. He led numerous expeditions, of which the Marshall Field Geological Expedition of 1922-23 is particularly notable. On that expedition he spent seven months in the interior of Brazil, traveling eight hundred miles by mule train and doing important work in the unworked mineral fields.

Doctor Farrington was president of the American Association of Museums during the year 1915-16.

# MEETINGS OF SOCIETIES

FIFTIETH ANNIVERSARY OF THE AMERICAN ORNITHOLOGISTS' UNION.—Among the most notable gatherings to which the American Museum has had opportunity to extend hospitality recently, was the semicentennial anniversary celebration of the American Ornithologists' Union and its 51st stated meeting, which convened there from November 14 to 16. The sessions were open to the public, and it is believed that this golden jubilee drew the largest attendance in the history of the Association.

Dr. Frank M. Chapman, dean of American ornithologists and curator-in-chief of the department of birds at the American Museum, had full charge of the plans for receiving the visiting bird men. President F. Trubee Davison gave the welcoming address, to which Dr. Alexander Wetmore, assistant secretary, Smithsonian Institution, responded on behalf of the Union. The three days were devoted to an elaborate program of papers and discussions by outstanding ornithologists from all parts of the country, followed over the week end by special excursions to Hempstead Lake State Park, Jones' Beach State Park, the New York Zoological Park, the Roosevelt Bird Sanctuary at Oyster Bay, the home of Mrs. Theodore Roosevelt at Sagamore Hill, the New Jersey Pine Barrens, and independent field trips in the New York City region. The anniversary dinner was held at the Hotel New Yorker on the evening of November 15. The members of the Union were also entertained by Dr. C. H. Townsend at a smoker in the New York Aquarium, and by Mr. and Mrs. Carll Tucker at their home in New York City.

One of the notable incidents of the conference was the presentation of the Brewster Medal to Doctor Chapman for his authorship of the Handbook of Birds of Eastern North America, Revised Edition, 1932.

In celebration of the Fiftieth Anniversary of the Union, a special exhibit of "Birds in Art" was arranged in Education Hall of the American Museum by the New York Local Committee, which had brought together a comprehensive selection of works representing birds either in a natural environment or used in decorativede sign.

The American Ornithological Union was founded in 1883 at a meeting held in a wing of the American Museum.

#### ASTRONOMY

THE AMATEUR ASTRONOMERS' ASSOCIATION holds the following meetings during January and February:

January 3—Dr. Herbert J. Spinden—"Mayan Astronomy"

January 17-Dr. John H. Pitman-"Precession of the Equinoxes"

February 7—Mr. James Stokley—"The Fels Planetarium of the Franklin Institute"

February 21-Dr. A. M. Skellett-"Meteors and Radio"

The Association has inaugurated an Amateur Telescope Making Class to be held on Thursday evenings during the winter and spring under the leadership of Mr. Ramiro Quesada.

#### NEW MEMBERS

CINCE the last issue of Natural History, the following persons have been elected to membership in the American Museum:

Sustaining Members

Mrs. WALTER C. BAKER. Mr. ERNEST R. GEERING

#### Annual Members

Mesdames Henry Bahnser, Gordon L. Beery, Frank A. E. Cott, W. R. Craig, Victor W. Cupples, Lewis L. Delafield, R. G. Duval, Henry Goldman, George Munro Goodwin, Charles E. Ludlow, Allan Ryan, Jr., William C. White, Helen Ziska.

WILLIAM C., WHITE, RELEN ZISKA.

Misses Eva G. Biberman, Laura B. Broomall, Louisa Bruckman, Mae Carden, Aileen Carver, Emma B. Croft, Alice Fitzegrald, Doris Laura Flick, Annie G. Foster, Alice M. Hoben, Russella Kerr, Catherine Murray, Blanche M. Oppenheimer, R. Eunice Parfitt, Nancy Scott, Lao Genevra Simons, Margaret W. Turner, Betty Zino.

Doctors L. C. Dunn, Frank E. Smith, J. Howard Wilson.
Messes, Morris W. Aller, Edgar A. Bedford, Claude
Brubeck, Edwin A. Carter, Waldemar Arens
Chadbourne, S. Sloan Colt, Gustavus W. Cook, J. H.
Coofer, Gardner Corning, Paul D. Cravath, F. N.
Doubledday, Daniel J. Dowdney, Louis Dupuy, W. A.
Flinn, Ernest Galarza, Robert T. Gannett, Donald D.
Graham, Irving H. Griswold, Toby Green, Frederick
L. Guggenhietmer, James Harper, Edmund S. Hawley,
I. A. Herskowitz, Gustavus M. Hollstein, J. H. McKinley, Josephi Plaut, Albert G. Redpath, Francis J.
Rigney, George Roll, Leonard Perkins Sayles,
Schuyler R. Schaff, S. Harvey Sklar, Herman T.
Spieth, Milton S. Steiner, Herman Steinkamp, L. L.
Strauss, W. Stephen Thomas, J. Leslie White, Walter
H. Wolff, Herbert S. Zim. Doctors L. C. Dunn, Frank E. Smith, J. Howard Wilson.

#### Associate Members

Mesdamcs George Cerio, Virginia T. B. Cobb, Eugene S. Coler, C. A. Corijss, Francis W. Davis, N. B.

Donaldson, J. H. Dougherty, Alfred Edey, Sydney Ferguson, J. H. G. Gilbert, Allison Gordon, W. C. Gulliver, Eugene A. Hildreth, G. F. Laidlaw, John F. Meigs, Francis R. Pyne, Lewis H. Sisson, Cecil Stewart, Wm. T. Walsh, Julian L. Woodward.

Sister HELEN ANGELA.

Misses Ethel Dieter, Josephine Dodds, Florence S. Dustin, Mary S. Gould, Bernice L. Maclean, Edith Mastin, Martida L. McCarthy, Dorothy Meier, Patricia O'Connor, Anna J. Rothschild, Margaret Storey, Helen C. Talbot, Joan Walsh, Priscilla Walsh, Suzanne Walsh, Mary A. White, Chi Nyok Wong

Rev. Dr. LE ROY GRESHAM. Reverend ARTHUR F. LEWIS. Doctor J. A. COYNE.

Professor CHARLES CHUPP. Brig, Gen. M. CHURCHILL.

Brig. Gen. M. Churchill.

Messfs. Henry W. Abbot, Marshal Chandler Bacon, Frank Bapyertz, Benjamin G. Bradley, Walter Briggs, Hedin Bronner, J. L. Brown, George B. Champlin, A. E. Clough, Philip H. Corb, A. F. Corwin, James W. Cox, Jr., Anast Danas, Frederick W. Dau, D. Davenport, Charles W. Davol, Robert H. Dean, Robert R. Dince, David Dolese, Robert H. Eanes, Arthur Cope Emley, Walter F. Farrell, Morris Fass, W. L. Goetz, A. C. Herbert, Reuben Holland, Davis W. Howe, E. R. Fennimore Jones, William D. Kleinfell, John M. Laing, N. R. Landon, Robert F. Livingston, Laurence S. Maynard, Ira H. Morse, Shaw Newton, Robert Winship Osgood, F. R. Pleasants, A. K. Pope, Peter Quinn, Heinz Rosemberger, Dean Sage, Jr., Wayne C. Smith, John Spalding, Frederic O. Spedder, H. Birchard Taylor, Hugh Maxwell Traphagen, Hans von Briesen, 2d, Augustus Willson Walker, John T. Wheeler, Arthur N. Woodward