

ago received Charles A. Coffin fellowships already have achieved a reputation for distinct contributions to science. Of the 45 men to whom these fellowships were awarded during the period 1923-1929, the names of 27 men are listed in the latest edition of "American Men of Science." At least ten of the group have attained national reputations, and some of them are already known internationally. At least three quarters of the group of seventy-two who received awards during the period 1923 to 1933 are now associated with universities or industrial organizations, carrying on research investigations.

Charles A. Coffin was one of the founders of the company, serving as its head for thirty years as its first president and as chairman of its board of directors. He died in 1926.

The committee on awards consisted of Dr. Bergen Davis, of the National Academy of Sciences, C. C. Williams, of the Society for Promotion of Engineering Education, and J. Allen Johnson, of the American Institute of Electrical Engineers. The committee was assisted by Dr. William D. Coolidge and Dr. Saul Dushman, both of the General Electric Research Laboratory.

## SCIENTIFIC NOTES AND NEWS

DR. FRANK DAWSON ADAMS, from 1894 to 1931 Logan professor of geology at McGill University, now emeritus professor and vice-principal, has been elected an honorary fellow of the Geological Society of Edinburgh.

THE medal and certificate of award of the St. Louis Medical Society has been presented to Dr. Edward A. Doisy, professor of biochemistry at the St. Louis University School of Medicine, in recognition of his work on the estrogenic hormones and for the isolation and preparation of theelin. Dr. Philip Shaffer, professor of biological chemistry at the Washington University School of Medicine, made the presentation address.

SAMUEL LOUIS HILTON, retail pharmacist of Washington, D. C., has been awarded the Remington Honor Medal for 1935 in recognition of his many years of service to the profession which culminated this year with the completion of the American Institute of Pharmacy, national headquarters of the profession in Washington. Mr. Hilton has served as president of the American Pharmaceutical Association and chairman of the council and has been a member of the revision committee of the United States Pharmacopoeia and at present is treasurer of the pharmacopoeial convention.

RAYMOND E. DAVIS, professor of civil engineering at the University of California, was recently awarded for the second time in four years the Wason Medal given by the American Concrete Institute. This award is made annually for the best paper on concrete presented to the institute during the year.

DR. FRANK B. JEWETT, president of the Bell Telephone Laboratories, was guest of honor at the annual meeting on April 9 of the New York Chapter of the Alumni Association of the Carnegie Institute of Technology. He spoke on the work of the Board of Trustees of the institute, of which he is a member.

DR. HUGH S. CUMMING, surgeon-general of the

United States Public Health Service, is among the alumni elected to membership in the Chapter of Sigma Xi of the University of Virginia. Formal initiation ceremonies for the new members will be held on April 24, when Dr. Ernest O. Lawrence, professor of physics and director of the radiation laboratory at the University of California, will give the annual Sigma Xi address.

THE William Mackenzie Medal for 1935 "for original contributions to ophthalmology of outstanding merit," has been awarded by the custodians, the Glasgow Eye Infirmary, to Dr. Ida C. Mann. The medal will be presented on June 7, when Dr. Mann will describe her work.

*Nature* reports that at the meeting of the Australian National Research Council at Melbourne, the first award of the Lyle Medal was made, the recipient being Professor J. R. Wilton, Elder professor of mathematics in the University of Adelaide. This medal is to be awarded, at intervals of two years, to workers in Australia for such researches in mathematics or physics as may appear to the council most deserving of such honor, the period covered being the five years preceding each award.

AT a recent meeting the Cleveland Academy of Medicine has awarded the title of honorary secretary for life to Dr. Jacob Edward Tuckerman in recognition of thirty-three years of continuous service to the academy in various capacities. Dr. Howard Lester Taylor, president, presented to Dr. Tuckerman an illuminated parchment on which was inscribed the action of the society, and Dr. George E. Follansbee paid tribute to his long service.

THE University of Cincinnati Section of Sigma Xi has elected the following officers: *President*, Dr. Charles N. Moore, professor of mathematics; *vice-president*, Dr. John H. Hoskins, associate professor of botany; *secretary-treasurer*, Dr. Saul B. Arenson, associate professor of chemistry.

DR. HENRI HARTMANN, professor of clinical surgery at the University of Paris, has been elected vice-president of the Paris Academy of Medicine.

DR. E. B. FORBES, director of the Institute of Animal Nutrition of the Pennsylvania State College, is visiting the agricultural experiment stations in Illinois, Minnesota, Missouri, Arizona and California. He spoke before a joint meeting of the Missouri chapters of the honor society of agriculture, Gamma Sigma Delta, and the Society of the Sigma Xi on March 19 on "Conditions Affecting the Utilization of Feeding Stuffs."

DR. URAL S. ASHWORTH, instructor in agricultural chemistry at the University of Missouri, has been awarded the Alexander Brown Coxe Memorial Fellowship in biological science at Yale University. Dr. Ashworth will continue his work on the composition of the body as it affects endogenous metabolism.

THE committee on scientific research of the American Medical Association has made a grant to Dr. Roy H. Turner, assistant professor of experimental medicine at Tulane University, to aid in studies of physiology in peripheral blood vessels in man. The David Trautman Schwartz Research Fund and the Josiah Macy, Jr., Foundation are also contributing towards the support of the researches of Dr. Turner and his associates.

AT the forthcoming meeting of the Pacific Division of the American Association for the Advancement of Science, Dr. K. F. Meyer, director of the Hooper Foundation of the University of California, will make an address on June 27 on "Plague—Past and Present."

THE James Arthur Lecture on the evolution of the human brain will be delivered on April 25 at the American Museum of Natural History, New York City, by Professor C. U. Ariëns Kappers, of the University of Amsterdam.

DR. GUIDO BECK, recently appointed professor of theoretical physics and director of the Institute of Theoretical Physics at the University of Odessa, U. S. S. R., lectured at the University of Oklahoma on April 5 and 6. His subjects were "The Theory of the Positive Electron" and "The Theoretical Treatment of the Radioactive Beta-decay." Dr. Beck is at present visiting professor at the University of Kansas.

DR. GEORGE E. UHLENBECK, professor of theoretical physics at the University of Michigan, recently gave three graduate lectures at the State University of Iowa. These were: "Statistical Energy Distributions for a Small Number of Particles, with Special Applications to Disintegration Problems"; "The Theory

of  $\beta$ -ray Radioactivity" and "The Stability and the Interaction of Proton and Neutron."

PROFESSOR A. E. DOUGLASS, of the University of Arizona, gave a lecture on March 30 at the University of Kansas City before a joint meeting of the Kansas City Section of the American Meteorological Society and the Sigma Xi Club of Kansas City. His subject was "Annual Rings in Trees and Long Range Weather Forecasting."

PROFESSOR NELS A. BENGTSON, chairman of the department of geography of the University of Nebraska and president of the Nebraska Academy of Sciences, will lecture during the summer session of Columbia University. He will give courses in economic geography and will conduct a special seminar in geography.

THE tenth International Congress of the History of Medicine will be held in Madrid from September 23 to 29, when the subjects for discussion will be: Arabian medicine in Spain; medicine in America during its discovery and colonization, and medical folklore in various civilized countries.

*Industrial and Engineering Chemistry* reports that the fourth International Congress of Agricultural Industries, which is to be held in Brussels from July 15 to 27 in connection with the Universal Exposition of 1935, is being organized by the International Commission of Agricultural Industries. The third congress was held last year, at Paris, and although intervals of three years between the congresses will ordinarily be observed, it was decided to hold the fourth congress in 1935, in order to set up a more effective organization of the congresses and take advantage of the Brussels exposition. The congress will be organized in four divisions: general scientific studies, agronomic studies, industrial studies and economic studies. There will be some twenty-six sections comprised in these four general divisions. In order to assure discussions of timely interest, special reporters upon ten such topics will be appointed, and the reports prepared by them printed and distributed in advance in order to assure fruitful discussion of these questions of priority. Applications for membership and for further information should be addressed to the International Commission of Agricultural Industries, 156 Boulevard Magenta, Paris (X<sup>e</sup>), France.

ACCORDING to *Nature*, at the next General Assembly of the International Astronomical Union, to be held at Paris from July 10 to 17, the French National Committee of Astronomy is arranging an exhibition of astronomical documents and apparatus, to exhibit the principles and the details of application of the methods of observation employed. The examination

of actual instruments shows better than any description how they are applied, while original negatives or positives on glass will enable the quality of the results obtained to be judged. The exhibition will enable astronomers to examine the documents serving as the foundation of the astronomical discoveries of the present century. It is particularly hoped that auxiliary apparatus and accessory contrivances of all kinds will be exhibited by observatories and instrument makers: such instruments are micrometers, chronographs, photometers, spectrographs, driving motors, observing sheds and seats, abacuses, numerical tables and calculating machines. Inquiries can be addressed to M. le Comte de la Baume Pluvinel or to Professor C. Fabry at the Paris Observatory.

A CORRESPONDENT writes: "The annual banquet and dance of the Botanical Society of Washington, D. C., was held on April 2 in the ball room of the Kennedy-Warren with an attendance of 187. After the dinner, Dr. Wm. H. Weston, Jr., professor of cryptogamic botany at Harvard University, gave an illustrated lecture on 'Sex in the Lower Fungi.' A most amusing, well-executed farce was presented by members of the society, the outstanding feature of which was the original poetry read by Dr. L. H. Flint."

GUEST speakers at the annual convocation on May 3 and 4 of the Nebraska Academy of Sciences, which will be held at the University of Nebraska, will be Dr. Victor Levine, of Creighton University, and Dr. J. B. Kincer, chief of the division of climate and crop weather of the U. S. Weather Bureau. The subject of Dr. Kincer's address will be "Man and His Climate with Special Reference to the Great Plains."

THE Virginia Academy of Science will hold its thirtieth annual meeting at the University of Richmond, Virginia, on May 3 and 4. One hundred thirty-five papers will be read and discussed in the sections of astronomy, mathematics and physics, biology, chemistry, geology and the medical sciences. Dr. Alexander Wetmore, assistant secretary of the Smithsonian Institution in charge of the U. S. National Museum, Washington, will be the principal speaker at the general session of the academy. His subject will be "Explorations in Hawaii."

ACCORDING to *The Museum News* the Washington meeting of the American Association of Museums will be held for three days beginning on May 23. There will be general sessions in the mornings with a more than usually varied list of speakers, and sectional conferences on one afternoon and two evenings. The meeting will end on Saturday with a trip of four hours on a chartered Potomac steamer. A similar feature years ago gave opportunity for getting acquainted and for informal discussions. There will be

one free afternoon to visit the museums of Washington. The Southern Museums Conference will be held on May 22, the day before the opening meeting of the association. The headquarters hotel, The Willard, offers rooms at rates from \$2.00 to \$6.00 a person. Reservation cards, with full details, will be mailed to members.

THE department of geology of the University of Wisconsin will conduct its biennial field trip in the pre-Cambrian area of the Lake Superior region from May 17 to 26. The trip will be under the direction of Professors C. K. Leith and Andrew Leith.

THE seventh Smithsonian anthropological and archeological expedition to Alaska, under Dr. Aleš Hrdlička, will leave Seattle on May 18. The excavations, as during the two preceding seasons, will be on the Kodiak Island. As on his previous trips, Dr. Hrdlička will be accompanied by a party of volunteer college students who with him will carry on the excavations. These students receive, aside from the field training, a course of tri-weekly lectures on the human skull and skeleton, on general anthropology and on the principles of American archeology. No charge is made for this instruction, but the students pay their own expenses. Due to the limited accommodations the number of students for the coming season must be limited to eight. There are still two vacancies. Applications should be made to Dr. A. Hrdlička, U. S. National Museum, Washington, D. C.

THE council of New York University has approved the change in name of the medical school of the university from New York University and Bellevue Hospital Medical College to New York University College of Medicine.

APPLICATIONS for the positions of associate engineer and assistant engineer in soils mechanics must be on file with the U. S. Civil Service Commission at Washington, D. C., not later than May 6. The entrance salary for the associate grade is \$3,200 a year, and for the assistant grade, \$2,600 a year. These salaries are subject to a deduction of 3½ per cent. toward a retirement annuity. The duties are to make or supervise the making of soil tests to determine coefficient of cohesion, angle of internal friction, time and amount of consolidation, coefficient of permeability, etc.; to devise and supervise the design of apparatus and equipment necessary for the testing and procurement of representative samples of soils and subsoils, and to analyze data and prepare reports on the condition and nature of soils and sub-soils as engineering and foundation material. Specified education and experience are required.

THE *Journal* of the American Medical Association reports that by the will of the late Walter G. Ladd,

the following bequests will become effective after the death of his widow: Somerset Hospital, Somerville, N. J., \$100,000; Elizabeth General Hospital and Dispensary, Elizabeth, N. J., \$25,000. The remainder of the estate, about \$10,000,000, will be divided into three trust funds: one to maintain the family estate in New Jersey as a convalescent home for "deserving gentlewomen," one to aid such persons elsewhere and the third to be used for hospitals, medical schools, universities, colleges and similar institutions "not existing for pecuniary profit." At the end of fifty years, the trusts are to be terminated and the principal will be divided among several institutions, including the New York Post-Graduate Medical School and Hospital and the Johns Hopkins Hospital.

THE University of Cambridge, England, has received a gift from Dr. G. P. Bidder, of Trinity College, to be used for a ten-year period for the benefit of occupants of the Cambridge table at the zoological station in Naples. It has also received a grant of £5,500 from the Goldsmiths' Company for an investigation of the alloys of silver to be carried out under the direction of Dr. R. S. Hutton, professor of metallurgy, Clare College, Cambridge.

*Nature* states that two new research laboratories are to be built for the Council for Scientific and In-

dustrial Research of Australia, using money voted for relief of unemployment. One, at a cost of £6,000, will replace an existing small building at the Council's viticultural research station near Mildura on the River Murray, where investigations into problems of the dried grapefruits industry have been in progress for many years. The other will house the Forest Products Division, which hitherto has carried on in temporary quarters in Melbourne. The new laboratory, to cost £25,000, will be in the midst of the city's timber yards, and this should mean decided increase in the practical effectiveness of the division's work.

ALLOTMENT of \$7,500 of Hawaiian sugar processing tax funds for the purpose of initiating a soil survey in the Territory of Hawaii has been made in an order which has been signed by Secretary of Agriculture Wallace and approved by President Roosevelt. The purpose of the survey is to secure comprehensive data on the adaptability of soils in various areas in the territory, particularly to serve as a guide in the use of land for crop diversification. The survey has been recommended by the Hawaiian Agricultural Advisory Committee appointed by the Secretary of Agriculture. The Bureau of Chemistry and Soils of the Department of Agriculture, which will collaborate with the University of Hawaii, has been placed in charge of the technical work of the proposed survey.

## DISCUSSION

### THE SIGNIFICANCE OF FOOD HABITS RESEARCH IN WILD LIFE MANAGEMENT<sup>1</sup>

THE term "wild life management" has taken on a meaning somewhat distinct from the older "conservation," in that it implies a less passive technique. It lays more emphasis upon the improvement and maintenance in an improved condition of environment for wild species and not so much upon the provision of sanctuaries and legal protection. This change of emphasis is entirely consistent with modern ecological thought. Meager as our knowledge may be, we are no longer so prone to assume that species may thrive in habitats unsuited to them, even if permanently protected against persecution by man.

Wild life management, as the term is used here, is not artificial propagation; it is the encouragement of wild creatures under conditions as nearly natural as possible. It does not inevitably follow that management of a species is synonymous with encouragement, though it commonly does. Broadly, management is human manipulation of wild populations and may be motivated by economic, esthetic or scientific objectives.

<sup>1</sup> Journal Paper No. J219 of the Iowa Agricultural Experiment Station, Ames, Iowa, Project No. 329.

The earlier efforts at management were, as might be expected, characterized by a great deal of blind groping.<sup>2</sup> This handicap has not been wholly removed from modern management either, for two chief reasons. In the first place, wild life management is beset by a formidable array of cherished popular prejudices which yield to contrary evidence with extreme slowness, if at all. Secondly, there is still a real deficiency in basic information on ecological questions.

While it may doubtless be said that many of the latter questions are unanswerable, it may be said with equal truth that many are so elementary and pertinent in relation to wild life management that their continued neglect does not flatter our sense of perspective. Intermediate between questions of these two extreme types, complex and simple, are a host of others, significant alike to pure and to applied science, at least some of which should prove amenable to investigation.

One of the most fundamental phases of ecological research pertaining to wild life management is the study of the food habits of animals. This should not

<sup>2</sup> Aldo Leopold, "Game Management," pp. 3-21. *Scribner's*, 1933.