None should be better qualified to attack the problem than those prospective scholars, and laymen also, whose complex of impelling motives, powers of discernment and discrimination, and constructive imagination it is the privilege of the college and the university to educate.

SCIENTIFIC EVENTS

THE CORNELL ORNITHOLOGICAL EXPEDITION

THE Cornell Ornithological Expedition, under the leadership of Dr. Arthur A. Allen, head of the department of ornithology at the university, returned to Ithaca on September 3 after a four-months journey to the southwest and the west coast.

Color movies and sound records of the Attwater prairie chicken, the rare trumpeter swan and the almost extinct California condor were obtained.

Albert R. Brand, research associate in ornithology at Cornell, a retired stock broker who is an authority on the sound recording of bird-songs, provided funds for the expedition, which left Ithaca on May 2 in a sound truck and traveled over 12,000 miles. The truck was equipped not only for recording the songs and calls of birds and making color-films, but with camping facilities. Assistants to Dr. Allen were David Allen, his thirteen-year-old son and Charles Brand, son of the sponsor of the expedition.

The object of the trip was to secure recordings of the songs and calls of birds new to the Cornell collection; to make color-films of as many birds as possible; to inspect various wildlife refuges and conservation projects of the different states through which the expedition passed and of the Federal Government and to gather as much data as possible relative to the organization and management of these projects for course-work to be conducted at Cornell.

Describing the expedition, Dr. Allen said:

> We proceeded first to Texas and Louisiana, following the southernmost route, through Brownsville, El Paso and Tucson, to Pasadena and Berkeley, where I gave a course in ornithology at the University of California, between June 26 and August 4. On the return we took the northern route, through Oregon, Washington, Montana, North Dakota, Minnesota, Michigan and Ontario.
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> We visited about two dozen of the state and federal wildlife projects, including seven of the national parks. We recorded the songs or calls of over a hundred kinds of birds not previously recorded; and we secured color-films of about 120 species, taking about 6,500 feet of color-film and 1,200 stills, which will greatly improve our classroom instruction, as well as being used to illustrate public lectures and general articles.

One of the accomplishments of the trip was the discovery of the nest of the coppery-tailed trogon, a tropical species which is found in the mountains of southern Arizona. The ornithologists of Arizona have been hunting for this nest unsuccessfully ever since the bird was first discovered in Arizona, about fifty years ago. The Cornell expedition was fortunate in being able to locate the nest and secure recordings of its voice and color-films of the bird, which has the reputation of being the most beautiful bird in North America. Other interesting or colorful birds recorded and filmed were the roseate spoonbills, on the Texas coast, the purple gallinules of Louisiana, wild turkeys, chachalacas, California, Gambel's and mountain quails, pelicans, vermillion flycatchers, cardinals, western tanagers and blue grosbeaks.

BALLOON FLIGHTS INTO THE STRATOSPHERE

THREE recent flights into the stratosphere over Beltsville, Maryland, by means of groups of rubber sounding balloons reached heights of 14 to 16½ miles above the earth. The balloons, sent up as a joint project by the National Geographic Society and the National Bureau of Standards, carried on each flight with an "observer," an ingenious robot consisting of electric batteries, a tiny motor, photo-electric cells, moving screens and radio tubes.

The object of the flights was to gather additional information about the atmosphere's ozone layer—an important concentration of the gas which screens away from the earth's surface certain rays of sunlight injurious to vegetable and animal life. The metal and glass robot made "readings" of the varying concentrations of ozone at different altitudes and automatically radioed them to a receiving station on the ground. The results are being compared with other observations for a later report by the National Bureau of Standards.

On each of the three flights the lifting power was furnished by six rubber, hydrogen-filled balloons attached in tandem. Four-and-a-half feet in diameter when they were released, these balloons expanded to diameters of 14 feet or more in the rare upper air near the top of the ascents.

The string of balloons continued to rise until one of them burst as a result of expansion. The remaining balloons lowered the observing apparatus slowly to the ground and in every case it was recovered. The flights were made under the supervision of Dr. Lyman J. Briggs, director of the National Bureau of Standards, and Dr. W. W. Coblentz, chief of radiometry at the bureau.

In the hope of reaching greater altitudes for the cooperative study of ozone concentrations, the National

Geographic Society is now having large rubber balloons fabricated. In the meantime improved instruments for detecting ozone and for radioing information back to earth are under construction in the laboratories of the National Bureau of Standards.

COURSES IN MODERN MANUFACTURING AND RESEARCH

NEW YORK UNIVERSITY, the Polytechnic Institute of Brooklyn and the Stevens Institute of Technology, in cooperation with the Westinghouse Electric and Manufacturing Company, have announced a series of post-graduate courses in industry which will enable selected graduate engineers to study modern research and manufacturing methods and earn credit for masters' and doctors' degrees.

These courses are the first to be held in the New York metropolitan area in which an industrial concern has cooperated with a group of educational institutions to provide training for advanced degrees to graduate students. They will be similar to those held with the cooperation of Professor H. E. Dyche, head of the school of electrical engineering at the University of Pittsburgh. As a result of graduate study in these classes in the past twelve years, sixty-six students have been awarded masters' degrees and six students Ph.D. degrees.

Students chosen for enrolment in the New York classes will include graduate engineers now employed by the Westinghouse Company and graduate students in engineering from the three cooperating schools. A joint committee, including Dean Erich Hausmann, of the Polytechnic Institute of Brooklyn; Dr. H. J. Masson, of New York University; Dean F. C. Stockwell, of Stevens Institute of Technology, and J. H. Belknap, manager of technical employment and training for the Westinghouse Company, will examine students and supervise the courses.

Among the first courses authorized will be classes in advanced illumination and in symmetrical components. D. W. Atwater, manager of the commercial engineering department of the Westinghouse Lamp Division and past president of the Illuminating Engineering Society, has been appointed Westinghouse lecturer for the class in advanced illumination. The course, following advanced study procedure in technical schools, will consist of two-hour lectures each on Monday nights, for sixteen weeks at the Westinghouse offices in New York City. The course on symmetrical components, dealing with electrical distribution systems, will be taught by B. V. Hoard, engineer of the Westinghouse Meter Works at Newark, N. J., and S. H. Wright, of the engineering department at Pittsburgh. Instruction will include details of technical procedure in current laboratory research and commercial production. Engineers in the industry will present the latest developments in each field.

MOUSE GENETICS

A CIRCULAR letter signed by L. C. Dunn, W. H. Gates, G. D. Snell and W. L. Russell was recently forwarded to biologists interested in mouse genetics, asking for opinions with regard to the possible establishment of a Committee on Mouse Genetics Nomenclature and of a Mouse Genetics News Service. As a result, at the meeting of the International Congress of Genetics at Edinburgh Professors F. A. E. Crew and L. C. Dunn and Dr. G. D. Snell were appointed a Committee on Mouse Genetics Nomenclature.

A meeting with Dr. A. L. Hagedoorn (Holland) in the chair was called to consider a set of nomenclature rules drawn up by the committee and to discuss details of the News Service. Twenty-five members of the congress were present. The recommendations of the meeting as regards nomenclature were submitted to the committee.

The offer of the director and staff of the Roscoe B. Jackson Memorial Laboratory in Bar Harbor, Maine, for the publication in mimeographed form of the *Mouse Genetics News* was gratefully accepted. It was suggested that a register of stocks and the various Pure Lines should be drawn up in order to end the confusion in the naming of Pure Lines used in various laboratories which has arisen during the last few years. It was recommended that stock lists of all the laboratories concerned should be published from time to time. It was further suggested that notice should be given by a laboratory before any stocks are discontinued; it has happened several times in the past that valuable material has been irretrievably lost, because every laboratory has relied on other places for its maintenance. It is proposed that the News Service should also arrange for exchange of stocks, and it is hoped that its activities may be extended to rabbits and other rodents, and it is suggested that an appeal be made to all laboratories concerned to collaborate wholeheartedly by promptly answering correspondence and sending information.

The meeting discussed the establishment of centers, preferably in the United States for the maintenance and safe keeping of stocks, particularly of genes (pathological and otherwise). It was pointed out that the continuity of genetical work depends on keeping genes alive, as genes which have died out are as irrevocably lost as extinct animal or plant species. It was urged that this matter should receive the immediate consideration of the News Service and that an appeal should be made to the Carnegie and Rockefeller Foundations for financial assistance.

THE AMERICAN ASSOCIATION OF MUSEUMS

THE San Francisco meeting of the American Association of Museums, which met from June 26 to 28,