

SCIENTIFIC EVENTS

AN AGRICULTURAL RESEARCH INSTITUTE FOR PORTO RICO

A NEWS bulletin of Science Service calls attention to the circumstance that President Hoover's visit to Porto Rico may revive interest in the establishment of a graduate school of tropical agriculture on the island, a project in which Governor Theodore Roosevelt is greatly interested. Pointing to the achievements of the school of tropical medicine which was established on the island in cooperation with Columbia University, Governor Roosevelt states his belief that Porto Rico is peculiarly fitted to become a great center for Pan-American research and learning.

Cornell University, in whose school of agriculture many Porto Rican boys have studied, is particularly interested in the proposed graduate tropic-agricultural school, and is expected to cooperate in its founding and maintenance. The National Research Council some years ago recommended such an institution. Subsequently members of the committee of biology and agriculture of the council visited Porto Rico and unanimously decided that it would be the logical place to establish such a school.

There is at present a good department of agriculture in the University of Porto Rico, graduates of which are more and more in demand in South American countries for special consultant and advisory work.

In 1926, Commissioner Carlos E. Chardon went to Colombia to make a survey for the agricultural school at Medellin, and, following the publication of his report, Colombia asked three graduates of the Porto Rico University to come there as teachers. Later an agricultural experiment station was built and equipped in the Department of Valle del Cauca in Colombia under Porto Rican guidance, and two former directors of the Porto Rican Agricultural Experiment Station were offered good consultant positions with sugar companies in Cuba, Santo Domingo and Peru.

Another result of the agricultural expedition to the Cauca Valley was a large collection of parasitic flora and the publication of a pamphlet called "Mycological Explorations of Colombia," which is in great demand among botanists.

Last year Ecuador sent its director of agriculture, Dr. Abelardo Pachano, a Cornell graduate, to Porto Rico to study agricultural research and experimentation. Dr. Pachano took two Porto Rican university agricultural graduates back with him to Ecuador. Venezuela, Panama and Peru have also offered positions to Porto Rican specialists in agriculture.

Because of the Spanish culture, language and tradition in the lives of Porto Ricans, Governor Roosevelt holds that the islanders are admirably adapted to act as intermediaries between the United States and South American countries on diplomatic missions. A still firmer basis of international understanding can be brought about, he believes, through help such as Porto Ricans now are rendering to South American countries along scientific lines.

For that reason, Governor Roosevelt hopes that the graduate tropic agricultural school on the island sponsored by Cornell University may soon become a reality. Soil possibilities of many of these south and central American countries are so varied that the day may well come when a wide variety of northern fruits and vegetables will be produced for home consumption in the tropics, as well as coffee, tobacco, pineapples and other tropical foods for export.

VIRGIN FOREST LANDS OF THE UNITED STATES

THE area of virgin forest lands in territory now within continental boundaries of the United States was approximately 800,000,000 acres at the time Columbus came to America and is now less than 100,000,000 acres, according to estimates made available on March 10 by the Forest Service and summarized in the *U. S. Daily*.

By far the greater portion of the decrease is attributable to clearings made to provide acreage for farms, particularly in the eastern section of the country. The area cleared to make way for agricultural operations since the beginning of the twentieth century is comparatively small, it was pointed out.

The estimates represent results of efforts to obtain the closest possible approximations in the face of absence of conclusive data, it was emphasized.

The total area of forest land in the United States, exclusive of Alaska, reached by forest fires in 1929 was 46,230,120 acres. Of this total 4,876,320 acres were located in protected areas while 4,353,800 acres on which fires occurred were not within sections over which organization for protection against fire has been established. The total amount of forest lands needing protection against fire is estimated by the Forest Service at 589,809,240 acres. Approximately two thirds of this acreage is protected.

A compilation made in 1923, showing little need for revision in later years, placed the amount of timber affected by the presence of insects at 9,000,000,000 board feet. This estimate includes not only the trees killed by bark beetles and defoliating in-

sects but also timber damage caused by borers and other insects which caused reduced timber values, affected chances of forest reproduction and impeded the growth of trees. A large amount of timber damaged by insects lends itself to salvaging operations.

The annual loss by decay has been estimated to be 300,000,000,000 board feet. Timber losses caused by erosion of soil are small, since the presence of tree stands are a protection against erosion, except in small areas, such as the banks of streams.

Although timber is being cut from some land to permit extension of farm areas, the amount of land formerly used for farming and allowed to revert to classification as "forest land" is larger. Any losses of timber resources that otherwise might take place are thus offset.

The Forest Service is now making a survey of forests in the United States which will require several years for completion. Survey work already has advanced in the Pacific Northwest region and in some other sections.

THE FIELD MUSEUM OF NATURAL HISTORY

THE annual report of Mr. Stephen C. Simms, the director of the Field Museum of Natural History, a book of 256 pages with twenty photogravure illustrations, has been issued. The museum was the recipient of a number of noteworthy benefactions during the year. Gifts received for various purposes include \$154,547 from Mr. Stanley Field, president of the institution; and \$166,000 from Mr. Marshall Field, of New York, a trustee.

After allocation of all contributions, and all income from the museum's endowments and other sources, the museum ended the year with an unprovided for operating deficit of \$114,898. Total expenditures for the year, including general operating expenses, purchases of collections, cost of expeditions (excluding those privately financed for the museum by various sponsors), equipment, the N. W. Harris Public School Extension of the Museum, and the James Nelson and Anna Louise Raymond Foundation for Public School and Children's Lectures, amounted to \$920,110. Mr. George A. Richardson was elected a trustee to fill the vacancy on the board caused by the death of Chauncey Keep.

Mr. Simms reports that the museum received 1,322,799 visitors during the year, and in addition, outside activities conducted by its units known as the N. W. Harris Public School Extension, and the James Nelson and Anna Louise Raymond Foundation, reached approximately 716,000 children in the schools, at camps, community centers and elsewhere.

The report gives detailed accounts of the work of seventeen expeditions which the museum had in operation both in this country and in distant parts of the world during 1930. Most important of these were the Vernay-Lang Kalahari Expedition, the Field Museum Archeological Expedition to the Southwest (financed from a fund established by Julius Rosenwald and the late Augusta N. Rosenwald), the two Chancellor-Stuart-Field Museum Expeditions to the South Pacific and to Aitutaki (Cook Islands), an expedition to Africa sponsored and led by Captain Harold A. White, of New York, and Major John Coats, of London; an expedition to India sponsored and led by C. Suydam Cutting, the Field Museum-Oxford University Joint Expedition to Kish, Mesopotamia, the Frederick H. Rawson-Field Museum Ethnological Expedition to West Africa and the Marshall Field Botanical Expedition to the Amazon.

A new exhibition hall devoted to marine mammals was opened, and throughout the museum a large number of new exhibits illustrating anthropological, botanical, geological and zoological subjects were installed. Work was begun on preparation of two new halls which will be devoted to comprehensive exhibits relating to prehistoric man and to physical anthropology. Hundreds of gifts of material for addition to exhibits and study collections were received from donors located in all parts of the United States and many foreign countries.

THE AMERICAN PHILOSOPHICAL SOCIETY

THE American Philosophical Society, Philadelphia, will hold its annual meeting on April 23, 24 and 25. The president, Dr. Francis X. Dercum, and the vice-president, Dr. Henry Norris Russell, of Princeton University, will preside over the session. Dr. Russell will give the evening lecture on "The Chemistry of the Stars." The annual dinner will be given at the Bellevue-Stratford Hotel on Saturday evening. A large number of papers will be presented on the opening day and a symposium has been arranged on "The Changing World," which is as follows:

SECTION I. TENDENCIES IN THE NATURAL SCIENCES

- "The Astronomer's Goal": Frank Schlesinger, director of the Yale University Observatory.
- "The Assault on Atoms and Molecules": Arthur H. Compton, professor of physics, University of Chicago.
- "Hopes in the Biological Sciences": William Morton Wheeler, professor of entomology and dean of the Bussey Institution for Research in Applied Biology, Harvard University.
- "Lengthening the Span of Life": Lee K. Frankel, second vice-president of the Metropolitan Life Insurance Company. (Introduced by Dr. Huebner.)