recommends the introduction of a number of valuable food and game fishes from the United States and the construction of a hatchery for their propagation.

Owing to the density of population of Puerto Rico there is a scarcity of food and the people living inland, particularly, are unable to secure food sufficiently rich in proteins. In his report to the Commissioner of Fisheries, Dr. Hildebrand states:

Puerto Rico has a considerable number of rather long, permanent streams, the longest and largest ones being the Rio Anasco, the Rio Grande de Arecibo, the Rio Manati, the Rio la Plata and the Rio Grande de Loiza.

Several streams have been dammed, creating reservoirs, used in part for irrigation and in part for hydroelectric purposes or both. The larger permanent reservoirs are: Gujataca, Cavite, Patillas, Guoyabal, Guineo and Comorio.

There are now no fishes of importance in the fresh waters of Puerto Rico. The lower stretches of the streams, up to an elevation of about 1,500 to 2,000 feet, are inhabited by the following species: The "dajoo," a fresh water mullet (*Agonostomus monticola*), which is of limited economic importance; 5 species of gobies, only 1 of which, the guovina (*Gobiomorus dormitor*), is of slight economic importance; a small top minnow (*Poecilia vivipara*), and the fresh-water eel (*Anguilla rostrata*), which is scarce. Above an elevation of about 2,000 feet no fish are present.

All the permanent streams and reservoirs examined, exclusive of Gujataca Reservoir, appear to possess physical and biological conditions which are suitable for the support of several species of American food and game fishes. The temperature of the waters is not excessively high. The upper stretches of the streams in some instances are low enough for trout. One reservoir (Guineo), located at an elevation of about 3,000 feet, too, appears to be cool enough for trout. The waters at lower elevations appear to be suitable for American warm-water fish, such as bluegills, crappies, catfish, etc.

All the streams up to the highest elevation reached (about 3,000 feet), and all the reservoirs (exclusive of Gujataca) are abundantly stocked with crustaceans, chiefly shrimp, and insects. Therefore, ample food for fish is present.

A small shipment of American fish, consisting of bluegill, sunfish, crappie and bullhead catfish, was introduced in two reservoirs (Cavite and Comorio), in about 1913. The fish survived and have multiplied, showing definitely that the conditions are suitable for these species of American fishes.

SYMPOSIUM IN THEORETICAL PHYSICS AT THE UNIVERSITY OF MICHIGAN

THE Symposium in Theoretical Physics at the University of Michigan will be held between the dates of June 25 and August 17. Throughout the eight weeks' session Professor George Gamow, of the Technological Institut of Leningrad, will lecture on the problem of the nucleus. Professor Gamow, on leave of absence from Leningrad, has been spending the past year at Paris, Cambridge and Copenhagen and will present, in addition to his own contributions, the most recent views developing in these centers of nuclear research.

"The Theory of the Positron" will be discussed by Professor Oppenheimer, of the California Institute of Technology. His lectures given in the first month of the session will treat the recent developments in the relativistic quantum mechanics stimulated by the discovery of the positron. Supplementing these lectures will be a series of lectures by Professor Uhlenbeck, of Michigan, on "The Dirac Theory of the Electron." These will also be given during the first half of the session.

Professor Ernest O. Lawrence, of the University of California, will present in lectures given during the second half of the session the methods and recent experimental results on nuclear disintegration by bombardment with fast particles.

A series of special lectures will also be given during the second month on "The Problem of Cosmic Rays," Professor Arthur H. Compton, of Chicago, lecturing on July 26 and 27, and Dr. Thomas H. Johnson, of the Bartol Research Foundation, initiating a series of six lectures to be given during a two-week period beginning on July 23. Among these special lectures will be several by Professor Dennison, of Michigan, on the problem of molecular structure as studied through infra-red absorption spectra.

Throughout the summer symposium courses on quantum mechanics will be given by Professors Uhlenbeck and Dennison and on Line Spectra by Dr. Robert Bacher.

The formal lectures will be supplemented by a series of informal seminars throughout the session under the personal direction of Professors Gamow, Uhlenbeck and Dennison.

The summer meeting of the American Physical Society will be held at Ann Arbor on June 29 and 30, during the first week of the session. Additional information regarding the symposium or about living quarters for either the symposium or meeting of the Physical Society may be had by addressing the director of the Physical Laboratories, University of Michigan, Ann Arbor, Mich.

NATIONAL RESEARCH FELLOWSHIPS IN THE BIOLOGICAL SCIENCES

THE annual meeting of the Board of National Research Fellowships in the Biological Sciences, for the award of appointments for 1934–35, was held in Washington, D. C., on March 24 and 25. Sixteen reappointments and twenty-five new appointments were made as follows: