birds. Based mainly on the songs of the males, his estimate showed that the breeding birds on these 800 acres include about 275 pairs of 51 species. In timber Mr. Howell noted 159 pairs of 28 species. In grassy fields he counted 38 pairs of 13 species. Slashings, he found, contained 42 pairs of 5 species; 20 pairs of 2 species were in swampy thickets; 12 pairs of 4 species in orchards or dooryards, and one pair in a marsh. Only one species of game bird has thus far been noted—4 pairs of bobwhites breeding in grassy fields.

The bureau has planted lespedeza, soybeans, millet and other food and cover plants to make the area more attractive for upland-game birds. Provision will also be made for propagating these birds in captivity for later release.

The two ponds for waterfowl to be created by building dams will be about a mile apart. The impounded water in each case, it is expected, will cover 18 acres.

By impounding water the bureau will also furnish suitable surroundings for muskrats and beavers—valuable fur bearers that contribute to the income of farms where they are encouraged. At the site of one of the projected ponds, workers have planted willows to furnish food for beavers, and additional provisions will be made for improving the food supply for fur animals. The area will include units for the production of fur animals in captivity.

The demonstration area will also serve as a wild-life experiment station. The results, it is expected, will be of value not only to farmers undertaking game management, but also to federal and state agencies in the administration of wild-life refuges. Specialists of the bureau will experiment with various methods of game-management and will study the factors influencing the abundance of wild life—including predators, rodents and diseases. Plans are being made for a central laboratory for detailed investigations, and provision will be made for keeping birds and animals under observation. This tract is typical of the areas

on thousands of farms, and the bureau intends to show how such a piece of land can be made of great value in furthering the national program of wild-life restoration.

## THE NATIONAL RESEARCH COUNCIL OF THE PHILIPPINE ISLANDS

THE National Research Council of the Philippine Islands was created in 1923 by the Philippine Legislature, under Act 4120. The council has been constituted as follows:

## EXECUTIVE BOARD

Chairman: Dr. Manuel L. Roxas, under-secretary, Department of Agriculture and Commerce, Commissioner of Research, acting director, Bureau of Plant Industry.

Vice-chairman: Dr. Bienvenido M. Gonzales, dean, College of Agriculture, University of the Philippines.

Executive Secretary: Dr. Patrocinio Valenzuela, associate professor, School of Pharmacy, University of the Philippines.

Members: Arthur F. Fischer, director, Bureau of Forestry; acting director, Bureau of Science; chairman, Division of Agriculture and Forestry. Dr. Eduardo Quisumbing, chief, National Museum, and curator, Philippine National Herbarium, Bureau of Science; chairman, Division of Biological Sciences. Angel S. Arguelles, assistant director, Bureau of Science; chairman, Division of Chemical and Pharmaceutical Sciences. Hermenegildo B. Reyes, professor of mechanical and electrical engineering, College of Engineering, University of the Philippines; chairman, Division of Engineering and Industrial Research. Dr. Antonio G. Sison, professor of medicine, College of Medicine and Surgery, University of the Philippines; chairman, Division of Medical and Veterinary Sciences. Dr. Victor Buencamino, director, Bureau of Animal Husbandry; chairman, Division of Government, Foreign and Educational Relations. The Reverend Miguel Selga, director, Weather Bureau; chairman, Division of Physical and Mathematical Sciences.

## SCIENTIFIC NOTES AND NEWS

Dr. Joseph S. Ames, president of the Johns Hopkins University, formerly professor of physics and for four years provost of the university, has announced his intention to retire at the close of the next academic year.

Dr. James Somerville McLester, professor of medicine at the University of Alabama, was chosen at the recent Cleveland meeting president-elect of the American Medical Association by a margin of fourteen votes. Dr. McLester received eighty-five votes in the House of Delegates against seventy-one for Dr. Hugh S. Cumming, surgeon-general of the United

States. Dr. McLester will take office next year, succeeding Dr. Walter L. Bierring, of Des Moines, who was elected a year ago. Dr. Dean DeWitt Lewis, surgeon-in-chief of the Johns Hopkins Hospital and professor in the university, was the retiring president.

Additional members of the Science Advisory Board, created by an executive order of President Roosevelt on July 31, 1933, have been appointed as follows: Dr. Roger Adams, president-elect of the American Chemical Society, professor of organic chemistry and chairman of the department of chemistry of the University of Illinois; Dr. Simon Flexner, director of the labora-