

Those already opened are the Bureau of Animal Nutrition (attached to the Rowett Research Institute at Aberdeen), the Bureau of Animal Genetics (at the Animal Breeding Research Institute, Edinburgh University), and the Bureau of Fruit Production and Storage (at the East Malling Research Station, Kent). These three bureaus are respectively under the direction of Dr. J. B. Orr, Professor F. E. Crew and Mr. R. G. Hatton. From May 1 the Bureau of Soil Science at Rothamsted (under the direction of Dr. Sir John Russell) will be open.

It is contemplated opening during the summer the Bureau of Animal Health (at the Veterinary Research Laboratory, Weybridge), the Bureau of Plant Genetics (other than herbage plants) at the Plant Breeding Institute, University of Cambridge, the Bureau of Plant Genetics (herbage plants) at the Welsh Plant Breeding Institute, Aberystwyth, and the Bureau of Agricultural Parasitology at the Institute of Agricultural Parasitology, St. Albans. These bureaus will be respectively under the direction of Dr. W. H. Andrews, Sir Rowland Biffen, Professor F. E. Stapledon and Dr. W. Leiper.

### U. S. BIOLOGICAL SURVEY

THE U. S. Department of Agriculture has authorized the creation of a new unit of the U. S. Biological Survey. Its purpose is to meet more effectively the obligations of the United States under the Migratory-Bird Treaty with Great Britain by lessening the dangers threatening wild fowl from drainage and other causes, through the provision of areas of land and of water to furnish in perpetuity reservations for their adequate protection through acquisition by purchase, gift or lease. The field of work will extend throughout the United States, including Alaska.

"In order to carry out the purpose of the act," it was explained by Paul C. Redington, Chief of the Biological Survey, "it is necessary to ascertain by examination of the numerous potential areas to be found throughout the United States those that are best adapted for refuges, to make appraisals in order to determine their character and value, and to conduct other activities incident to their acquisition with the funds made available by Congress from time to time.

The units selected for migratory-bird protection will be more or less extensive areas of lowland, comprising marsh and woodland contiguous to or embracing water areas, or they may be areas that were formerly well suited as feeding and nesting grounds for migratory birds, but now useless by reason of drainage developments or evaporation and subject to restoration to their natural conditions. The Migratory-Bird Conservation Commission created by the act will

consider and pass upon all lands recommended by the Biological Survey for acquisition for refuge purposes. The Secretary of Agriculture is chairman of the commission.

"In addition to having charge of the land acquisition under the Migratory-Bird Conservation Act, the new division will supervise all other land acquisition and cadastral survey activities of the Bureau of Biological Survey, including the Upper Mississippi River Wild Life and Fish Refuge and Bear River (Utah) Migratory Bird Refuge."

### THE NATIONAL ARBORETUM

THE Secretary of Agriculture has appointed a committee of the department to confer with the National Arboretum Advisory Council as required by the Act establishing the Arboretum.

The members are: Dr. A. F. Woods, director of scientific work; Dr. W. A. Taylor, chief of the bureau of plant industry; Major R. Y. Stuart, chief of the forest service, and Dr. F. V. Coville, and Dr. W. T. Swingle, of the bureau of plant industry.

Members of the National Arboretum Advisory Council are: Frederic A. Delano, member, National Capital Park and Planning Commission, Washington, D. C., chairman; Dr. L. H. Bailey, author and botanist, Ithaca, N. Y.; Dr. John C. Merriam, president of the Carnegie Institution, Washington, D. C.; Mrs. Frank B. Noyes, Garden Club of America, Washington, D. C.; Mrs. Harold R. Pratt, secretary of the Garden Club of America, Glen Cove, Long Island; Harlan P. Kelsey, nurseryman, Salem, Mass.; Frederick Law Olmsted, landscape architect, Brookline, Mass.; Robert Pyle, chairman of the Botanical Gardens and Arboretums Committee of the American Association of Nurserymen, West Grove, Pennsylvania, and Professor Henry S. Graves, Yale Forest School, New Haven, Conn.

The National Arboretum, as authorized by the Congress, will be developed on a large tract of land in the District of Columbia, including reclaimed land near the Anacostia River above the Benning Bridge. It will be both an educational and recreational center, and an important adjunct to the scientific activities of the government, particularly of the Department of Agriculture.

To the fullest degree possible, it is expected, the management of the National Arboretum will collect plants and trees from all the regions of the world for cultivation, study and breeding in the grounds of the arboretum. Dr. Coville, one of the members of the departmental committee, has suggested the function of the arboretum in such phrases as a "living library of the plants of the world," and as "a five-foot shelf of the more important plants."