tion Commission and the lands are bought by the Forest Service of the Department of Agriculture. Areas that have not yet been submitted for the approval of the commission include lands in Mississippi, Kentucky and eastern North Carolina.

Areas recently approved by the commission, which are being bought by the Forest Service, Mr. Kneipp explained, are 100,000 acres in southern Vermont, and areas near Lake City, Florida; in Wisconsin, the upper peninsula of Michigan, upper Minnesota, other parts of Michigan, Louisiana, and eastern South Carolina, and privately-owned lands within the National Forests of Choctawhatchasee and Ocala, Florida.

The general program of national-forest purchases, according to the National Forest Reservation Commission, divides the 9,600,000 acres to be acquired into the following four subdivisions:

Consolidation of federal ownership within nationalforest units heretofore approved by the commission, and situated on the headwaters of navigable streams; approximate area to be acquired, 4,000,000 acres.

Establishment of necessary additional nationalforest units for protection of headwaters of navigable streams and reduction of floods thereon; approximate area to be acquired, 2,000,000 acres.

Consolidation of federal ownership within nationalforest units on watersheds of navigable streams heretofore approved by the commission in Michigan and Minnesota, primarily to aid in timber production and demonstrate forestry practice; approximate area to be acquired, 1,100,000 acres.

Creation of a limited number of additional nationalforest units in southern pine region and northern Lake States, primarily to aid in timber production and demonstrate forestry practice; approximate area to be acquired, 2,500,000 acres.

## INSTITUTE OF TROPICAL MEDICINE AT THE UNIVERSITY OF CALIFORNIA

TENTATIVE plans for the University of California Institute of Tropical Medicine have been announced at the Hooper Foundation, research center of the medical school, providing for lectures in the summer of 1930, according to a statement made by Dr. Alfred C. Reed, professor of tropical medicine.

The purpose of the new organization is threefold, Dr. Reed explains. It will provide the only western center for the treatment and study of tropical diseases and for research in general problems of health and food preservation in the tropics or locally as a result of conditions having their origin in the tropics.

Research, public education and treatment of individuals suffering from tropical diseases are given as the three phases of work to be carried on.

Under research are included the practical problems of health and disease in tropical countries; the problems arising from shipping between the United States and tropical countries, both as regards cargo and the personnel of the ships, passengers and crew, and the problems presented by epidemics of tropical diseases such as meningitis, cholera, yellow fever, etc.

Under public education Dr. Reed lists four lines of endeavor. First, regular courses in tropical medicine for graduate physicians from every part of the world. Second, courses in tropical public health service for nurses going to tropical countries or on ships touching at tropical ports. Third, courses on tropical medicine for students in the University Medical School, as desired. Fourth, public instruction in tropical hygiene and public health through popular lectures and a course for prospective travelers, merchants, soldiers and others intending to visit tropical countries.

Under treatment of individuals is included all such treatment as can not well be taken care of elsewhere. It is thought that the university center will care for people in all parts of the west, as the next closest center for the treatment of tropical diseases is in Galveston. Another is in New Orleans, but the rest are on the Atlantic seaboard. None of them, Dr. Reed says, is as wide in scope as that planned for the University of California.

Concerning the shipping problems to be studied, San Francisco, Los Angeles and other Pacific Coast ports are unloading places for innumerable cargoes of tropical goods, from copra, oil, forest products and foodstuffs on down. This commerce not only offers a means of entry for tropical diseases and parasites of many kinds, but is itself often hampered by the action of parasites in cargoes en route. This, is particularly true in the case of cargoes of foodstuffs, recent reports having been received of the spoilage of large cargoes of cocoa-beans by an insect parasite.

## CENSUS OF MIGRATORY WATERFOWL

Data on the bulk movement of migratory waterfowl, such as ducks, geese, swans and coots, during their spring and fall migration, and on the limited areas of their winter concentration, are being accumulated through waterfowl censuses under the leadership of the Biological Survey of the Department of Agriculture. This census taking, which was inaugurated about eighteen months ago, is carried on through the cooperation of about 3,500 volunteer observers.

The waterfowl are widely distributed at various seasons throughout North America. In order to get definite information regarding their occurrence, numbers and migratory movements, direct observations must be made at regular intervals at a great number

of stations throughout this enormous area. Each observer selects an area typical of waterfowl conditions in his general region, and agrees to count the birds there once a month on a date that is the same for all observers.

Some of these cooperators travel on foot or in row-boats; others use automobiles or motor boats. Wherever possible, the birds are actually counted, but where the numbers are too great for this, careful estimates are made and recorded.

In the United States twelve bureaus or major units of the federal government that have field men stationed in suitable localities are cooperating with the Biological Survey in the undertaking. In Canada the censuses are conducted, also cooperatively, through the office of the National Parks of Canada.

All states and provincial departments concerned with game administration are giving active cooperation, and in many instances the entire warden force is aiding in the work. Information obtained through these censuses helps to fix proper open seasons and bag limits.

It will be necessary to accumulate reports over a period of two or more years before a basis for calculations regarding possible increase or decrease in the waterfowl population can be established.

## ANTHROPOLOGICAL SCHOLARSHIPS

THE Laboratory of Anthropology at Santa Fe announces the award of the following field-training scholarships for the summer of 1929:

Ethnology: Fred B. Kniffen, University of California; Robert A. McKennon, Harvard University; Gordon McGregor, Harvard University; Haviland S. Mekeel, University of Chicago; Maurice A. Mook, Northwestern University.

Linguistics: Harry Hoijer, University of Chicago; Berard Haile, Catholic University; Victor E. Riste, University of Washington; William H. Sassaman, University of Chicago.

Archeology: Isabel T. Kelly, University of California; Eva M. Horner, University of Chicago; William B. Bowers, II, Harvard University; Ssu-Yung Liang, Harvard University; Frances E. Watkins, University of Denver.

Alternates have been appointed as follows: Ethnology, Vincent M. Petrullo, University of Pennsylvania; Linguistics, Robert B. Hitchman, University of Washington; Archeology, Owen S. J. Albert, University of Chicago.

The scholarships are designed to enable properly qualified graduate students who are preparing themselves for professional careers in anthropology to supplement, by practical work in the field, the classroom and laboratory instruction which they receive at the universities. Recipients of scholarships will take part in the current investigations of experienced research men; they will have opportunity to become familiar with the use of modern field methods for the collection of data; they will gain experience in the interpretation of these data and in their application to anthropological problems, specific and general. It is planned to offer, year by year, scholarships for work in various branches of anthropology in various geographical areas.

The area for 1929 will be the southwestern part of the United States. Scholarships are offered for training in archeology, ethnology and linguistics. Scholars in archeology will be assigned to the excavations of Phillips Academy, Andover, at Pecos, N. M., directed by Dr. A. V. Kidder. Scholars in ethnology will take part in studies of the Walapai of Arizona, under direction of Professor A. L. Kroeber, of the University of California. Scholars in linguistics will accompany the field party of the University of Chicago, Professor E. Sapir in charge, to the Navaho. At the close of the field season scholars and investigators will meet at Pecos for a week of discussion and the correlation of results.

For the fourteen scholarships available there were received thirty-eight applications from ten universities. Of these, fifteen were for archeology, eighteen for ethnology and five for linguistics; twenty-seven from men, eleven from women. The quality of the candidates was, in most cases, so high that great difficulty was encountered in making selection.

Certain principles were adhered to by the committee: (1) That as the scholarships are expressly designed for students who have lacked opportunity for work in the field, applications from persons who have had such opportunity should this year be refused. (2) That students who are only to receive their A.B. degree in June, 1929, should, other things being equal, be ranked below those who have already had one or two years of graduate work. (3) That as there are at present open to women relatively few professional positions in anthropology, the number of scholarships granted to women should be limited. Furthermore, the conditions under which the investigations are being carried on during the summer of 1929 preclude the assignment of women to the ethnological and lin-Women, therefore, were assigned guistic parties. only to the archeological party, but it is hoped to arrange the field work in future years in such a way as to permit all properly qualified women students to have at least one season as a scholarship holder during the course of their graduate school work.

> FAY-COOPER COLE, R. B. DIXON, A. V. KIDDER, Chairman