

will be possible then to budget the fish stocking program of the zone as well as the country as a whole. The overlapping of fish planting in some sections and the complete lack of stocking in others can thus be avoided, and the regulation of the commercial fisheries can be coordinated.

The council elected the following men as their officers for the ensuing year: *Chairman*, I. T. Quinn, fish and game commissioner of Alabama; *Vice-chairman*, James G. Hammond, fish and game commissioner of Connecticut; *Secretary-Treasurer*, Ted Little, of the U. S. Bureau of Fisheries. Commissioner Frank T. Bell was named honorary chairman. The zone chairmen for the various zones are: Western Zone, M. F. Corrigan, president, Board of Game Commissioners of Oregon; Midwest Zone, W. C. Buford, fish and game commissioner of Missouri; Southern Zone, W. E. McIntyre, chairman of the Board of Fish and Game Commissioners of Alabama; North Central Zone, Fred A. Westerman, in charge fish and fisheries, Department of Conservation, Michigan, and North Atlantic Zone, Major James Brown, commissioner of fish and game, Vermont.

#### THE RECENT DESTRUCTIVE DUST CLOUD

THE dust cloud which recently swept over nearly half the United States originated largely on overgrazed semi-arid lands and on former cattle range land plowed for wheat near the eastern side of the Rocky Mountains, according to the Forest Service. Drought conditions extending eastward across the Mississippi permitted soil from midwestern states to blow as far as the Atlantic Ocean, darkening the skies over the National Capital and other cities.

Permanent damage to land as well as current damage to crops will result from such dust clouds, says the Forest Service, pointing out that although the dust storm is a new phenomenon to the people in the East, it is becoming increasingly common over wide areas of the Great Plains. For several years reports of wheat crops being blown out of the ground and highway and street traffic becoming snarled in clouds of dust have been coming from those regions, despite the fact that the velocities of winds do not seem to have increased. A statement recently issued by E. A. Sherman, associate forester of the Forest Service, said:

That is the way deserts start. Excessive grazing, which destroys the protective vegetative cover and permits the ground to be trampled into dust, and the plowing up of naturally well sodded grazing lands for grain crops make it easy for the wind to whip away the dry soil and develop into a destructive dust storm. Wind erosion on the plains is like water erosion in states farther east in its power to destroy rich land in a few years

and to transform broad stretches of country into devastated badlands.

Unless more conservative grazing is practised on semi-arid land and unless greater care is exercised in plowing up extensive areas for wheat production in regions subject to drought, desert conditions will begin, and once established, these lands can never be reclaimed.

It is a mistake to cut down or burn up forests or to plow up sods in regions where the elements tend to cause accelerated erosion. Badly managed grazing may be equally destructive of land fertility, and carries with it menace of floods as well as dust storms. Within the last year or two, the country has also had examples of mudflows from overgrazed ranges and from burned-off areas, which cost human lives and heavy property losses. The nation should take warning from the present disastrous dust storm, and adopt measures to avoid future damage.

The Forest Service recommends that serious consideration be given to the preservation of the areas thus threatened. Large areas of range and plowed lands should be revegetated, put back to growing grass. Good management requires that grazing and use of these lands should be regulated to prevent further destruction. In some regions more shelterbelts of trees are practical and desirable. Much more is at stake than the lands already devastated, say the foresters. If steps to revegetate these lands and protect other lands are not taken promptly, vast areas will in a few years be under constant threat of dust storms and distressing droughts.

#### GOVERNMENT APPOINTMENTS FOR CIVIL ENGINEERING GRADUATES FROM SYRACUSE UNIVERSITY

IN 1929 the Guggenheim Fund for the Promotion of Aeronautics gave a grant of \$60,000 to Syracuse University for the development of work in aerial mapping and surveying in the College of Applied Science.

In addition to a number of publications which have been issued in connection with this work, there has been an increased demand for students who are trained in this branch of engineering.

The department of aerial photographic surveying in the College of Applied Science has recently been asked to furnish several engineers for the extensive aerial survey work now being undertaken by the U. S. Forest Service in Washington. Professor Earl Church has received notification from the director of surveys of the Eastern Department of the Forest Service that sixteen of the civil engineering graduates of the College of Applied Science, who have taken the work in aerial photographic surveying under his direction, have been selected to receive appointments. These include eleven of the men who have been graduated previously to this year and the five members of the present senior class who are now taking this work.

The Forest Service is undertaking the project of mapping about 10,000 square miles by aerial photographic methods. Contracts have been awarded for the photographing of about 7,500 square miles of this area. It is difficult to obtain engineers for this undertaking who are familiar with the interpretation of aerial photographs by the use of stereoscopes and who have been instructed in the fundamental principles involved in the map compilation. The training in this work which has been offered at Syracuse University for the past few years by virtue of a grant for initial equipment from the Guggenheim Fund specifically prepares engineers for this modern method of surveying and has made it possible for this large group of civil engineering graduates to enter this field.

W. H. Baker, of Lafayette, N. Y., and R. T. Hedden, of Robinson, Illinois, both of the class of 1931, and M. K. Linck and George Schmidt, of Syracuse, of the class of 1932, have been chosen to receive appointments as photogrammetrists. This position entails a considerable amount of responsibility, for these men will be placed in direct charge of offices where the technical work of map compilation will be carried on.

#### THE AWARD OF STERLING FELLOWSHIPS AT YALE UNIVERSITY

THE Yale Graduate School has announced the award of 168 fellowships and scholarships for the academic year 1934-35. The recipients have studied in the graduate and undergraduate schools of 92 American

colleges and universities; the Universities of Munich, Hamburg, Freiburg, South Africa, New Zealand, London; McGill University, the College of Yale-in-China and Cambridge University. They are residents of thirty-four states and Canada, China, England, Germany, Korea, New Zealand and South Africa.

The most important awards are the Sterling fellowships which are given annually to scholars who already hold the degree of doctor of philosophy or its equivalent. Twenty Sterling fellows have been appointed for next year.

These include the following in the sciences: Tze Tuan Chen, of Foochow, China, will extend his present study of the mechanism of heredity among some unicellular organisms; and Dr. Ernest C. Polard, of Lincolnshire, England, will continue his investigation of the light atomic nuclei by observation of their disintegration under alpha-particle bombardment. Dr. Charles D. Aring, of Cincinnati, Ohio, will work on problems of localization in the cerebral cortex.

The Bishop Museum fellowships, established under an agreement between the Bernice P. Bishop Museum in Hawaii and Yale University to promote scientific investigations within the Pacific Ocean region, have been awarded to Dr. Horace B. Baker, of the Department of Zoology, of the University of Pennsylvania; and for a second year to Dr. Ernest Beaglehole, an anthropologist from Wellington, New Zealand.

## SCIENTIFIC NOTES AND NEWS

THE Boston Society of Natural History has awarded the Walker Grand Honorary Prize of \$500 to Professor William Berryman Scott, of Princeton University, for "his half century of conspicuous effort to advance the science of vertebrate paleontology in North America." Professor Scott is professor emeritus at Princeton University, where he held the Blair professorship of geology and paleontology from 1884 to 1932. The Walker Grand Prize is awarded once in five years by the society from a trust fund donated by Dr. William J. Walker in 1864 "for such scientific investigation or discovery in natural history as the society may think deserving thereof, providing such investigation or discovery shall first have been made known and published in the United States."

FOR his contributions to the study of music, Dr. Carl E. Seashore, professor of psychology and dean of the graduate college at the University of Iowa, was honored for the seventh time on May 22 with an annual commemorative concert. Dr. Seashore plans to retire as dean of the Graduate College in 1935. He asked to be relieved of administrative work this spring

in order to devote more time to research, but was persuaded to continue the deanship for another year. Dr. Seashore, who has been connected with the university since 1897, has been head of the department of psychology since 1902 and has served as dean for twenty-six years.

A PORTRAIT of Dr. Harold Dickinson Senior, professor of anatomy at New York University and Bellevue Medical College, was recently presented to the college by the faculty, alumni and student body. The portrait was painted by Charles R. Boynton in recognition of Dr. Senior's twenty-five years of service in the college. Dr. Benjamin Spector, professor of anatomy at Tufts Medical College, who made the presentation, reviewed Dr. Senior's work and spoke of the affection and esteem in which he was held by his students and associates.

DR. LEON J. MENVILLE, assistant professor of medicine and roentgenology at the Tulane University of Louisiana School of Medicine, New Orleans, was presented with the medal of the Louisiana Academy of Sciences at its recent annual meeting, for his paper