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 semiarid 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.