

The election of the following officers for 1937 was announced: *President*, G. A. Elliott, Department of Agriculture, Ottawa, Canada; *Vice-president*, Miss Emma Sirrine, Bureau of Plant Industry, U. S. De-

partment of Agriculture, Washington, D. C.; *Secretary-Treasurer*, W. A. Davidson, Bureau of Plant Industry, U. S. Department of Agriculture, Washington, D. C.

SCIENTIFIC EVENTS

HABITAT GROUP OF EMPEROR PENGUINS AT THE FIELD MUSEUM

A HABITAT group of rare emperor penguins, composed of specimens collected by Admiral Richard E. Byrd on his last expedition to the Antarctic (1935), was opened to public view at the Field Museum of Natural History on July 7.

The specimens are a gift to the museum from the Chicago Zoological Society, which obtained them from Admiral Byrd. They were taken to Chicago alive and were for some time resident at the society's zoological gardens at Brookfield. However, they subsequently died of a respiratory disease. As the best means of preserving them in the semblance of life, the Zoological Society presented them to the museum, where they now appear, mounted in lifelike attitudes amid a reconstruction of their natural environment in "Little America."

The group was planned and prepared under the direction of Rudyerd Boulton, assistant curator of birds. John W. Moyer, staff taxidermist, mounted the birds, and the scenic background is the work of Charles A. Corwin, staff artist, and Arthur G. Rueckert.

The emperor penguins are the largest and rarest of all penguins, according to Mr. Boulton, who writes:

They are found only at the earth's southern extremity. They stand from three and one half to four feet tall, and weigh on the average about 73 pounds, but large specimens have been known to reach as much as 94 pounds. The average temperature of the region they inhabit is 50 degrees below zero. The birds are flightless, using their small highly specialized wings principally to aid them in swimming. Usually they walk in an upright position, but when in a hurry they glide over the ice and snow on their stomachs, using both feet and wings to assist them in locomotion. Their average life span is about 34 years. They have few enemies, although they are preyed upon to some extent by whales and seals. Because of the rarity of their contacts with men, they display no fear, and have been found by explorers to be remarkably tame.

One of the most interesting things about the emperor penguins is their unique method of incubating their young. The eggs are laid during the long Antarctic night, only one to a female. After an egg is laid, it is rolled on top of the bird's foot, and a flap of loose skin folds over it to protect it and incubate it. When the bird is tired of carrying the egg thus, it rolls it off the foot, and immediately a number of others rush up to roll it

on theirs. Both males and females participate in this transference of eggs, and when finally hatching occurs it is as likely to be while the egg is in custody of a male as a female. In the great majority of cases the egg is probably completely lost to its own parents, and the chick, when hatched, likewise probably seldom comes into the care of its own progenitors. The chicks, in their earliest stages, are, like the eggs, cared for by being folded in the skin flaps above the adults' feet. Because of the frequent transfers of both eggs and chicks from one adult to another a great many of the eggs are broken, and many of the chicks killed. The mortality among the young is estimated at 77 per cent.

THE DUST BOWL AREA

ONLY about half the land in the Southern Plains region—the area called the "Dust Bowl" because of recent spectacular wind erosion—has been seriously eroded, according to a survey by the Soil Conservation Service covering 25,000 square miles in twenty counties of Texas, Kansas, Colorado and Oklahoma.

A preliminary report, covering 15,810,885 acres, shows that approximately 7,091,000 acres, or about 43 per cent. of the surveyed area, is suffering only slightly from wind erosion, with a considerable area completely unaffected. Approximately 8,710,000 acres are affected to an extent regarded as serious. Included in the survey were 16,805 farms valued at \$189,876,291.

In announcing the preliminary results of the survey, H. H. Bennett, chief of the service, pointed out that in the Southern Plains country, as elsewhere, there are certain areas unfitted by nature for cultivation. Also in this region, as in all other regions, unwise land use and ill-advised farming practices have contributed to the impoverishment of other areas of good crop land. The results of this survey indicate clearly, however, that the Southern Plains is not yet a desert by any means and that the opportunity for agriculture there is far from ended. Nevertheless, the Southern Plains farmer must quickly adapt himself to natural conditions, if wind erosion is not to spread throughout most of the region. Conservation farming, involving precautionary crop planning, contour tillage and other measures of soil and moisture conservation must be adopted.

Prior to the survey just completed, the actual extent of erosion damage in the area was not known, although in the summer of 1934 the service conducted a nationwide erosion reconnaissance survey, which included in its broad appraisal of erosion damage the territory