

THERE was a marked international atmosphere about the Eighteenth Conference of the New Zealand Grassland Association at Canterbury Agricultural College, Lincoln, at the end of November. The conference had been preceded at the beginning of the month by the Seventh International Grassland Congress at Palmerston North and 85 delegates from 15 countries who had filled in the interim by taking part in tours of both the North and South Islands attended the Lincoln conference, several of them contributing papers and many taking part in discussions.

THIS is a notable year in the history I of the New Zealand Grassland Association," said Professor J. W. Calder in his presidential address. "It is 25 years since the Association was formed and in this, its silver jubilee, it has acted as host to the Seventh International Grassland Congress. . I believe on an occasion such as this that it is appropriate for the Association to recognise and acknowledge the debt it owes to the pioneer grassland workers in New Zealand, farmers and professional workers alike. These men set in train, 40 or 50 years ago, the course of events which led to the present level of pasture production and management, to the formation of the New Zealand Grassland Association on 5 August 1931, and to the latest honour of being host to the Seventh International Grassland Congress."

The importance of agriculture and of production based on pastures in the national economy of New Zealand was illustrated by Professor Calder in a historical review of the development of primary industry. In referring to the changed face of the countryside as a result of the prosperity over the past 20 years, he said:—

"Thirty years ago in Canterbury we believed (1) that ryegrass pastures would not last more than 3 years; (2) that it was useless to apply lime to the land; (3) that it was unnecessary to sow white clover, as there was plenty of seed in the soil. What a revolution in knowledge and achievement has occurred since then!

"We can now expect, under our 25in. rainfall, high-producing pastures, based on ryegrass, to remain down for anything up to 10 years or more and support, according to soil type, 3 to 6 or more ewes producing fat lambs per acre."

Prerequisites for these pastures were listed by Professor Calder as (1) application of 1 ton of lime every 3 to 5 years; (2) good cultivation and seedbed preparation for small seeds; (3) regular applications of 1 to 2cwt, of superphosphate per annum; (4) the use of certified strains of grasses and clovers; (5) grazing management practices that keep in circulation a high proportion of the nutrients of the herbage so that the pastures are continually being topdressed in the form of dung and urine of the grazing animals to stimulate the growth of more herbage.

"These pastures and the system of husbandry associated with them," said Professor Calder, "are fertility building. It is the general experience of farmers that since the high-producing pastures have been introduced to their farms, crop yields have improved. On our College farm average wheat yields have increased over the past 15 years from 45 bushels per acre to 54 bushels per acre and the New Zealand average has increased over the same period from 32 bushels per acre to close on 40 bushels per acre.

"The good pasture," Professor Calder continued, "is the basis of good hus-

HEADING PHOTOGRAPH: A bus convoy prepares to leave for a field trip to Ashley Dene, the College light land property, where the introduction of subterranean clover and grazing lucerne has doubled production since 1938.