

"Further, there is such a well-defined relationship between length and thickness of back-fat that few short pigs are found to have thin back-fat, and few long ones to be excessively fat on the back. Hence producers are still strongly advised, as before, to concentrate on producing long pigs, since length can be measured while the pig is still alive, and since long pigs tend to be thin on the back.

"The grading measurements are taken by the works grader, who grades the pig and affixes a tag, showing the grade. Meat Inspectors check the grading daily in each plant, and the Meat Board's grader checks it from time to time to ensure uniformity between one works and another. A number of difficulties incidental to the introduction of any new undertaking has been experienced, but with the excellent co-operation of the trade it is felt that these will be satisfactorily mastered.

"*General Activities of Field Officers.*—The services of departmental field officers have been made use of during the last year in two new directions, firstly in the collection of a quarterly census of pigs on a number of farms. Each officer has made arrangements with a number of producers in his district to keep records of his pig production, numbers on hand, sales, purchases, deaths, feed-supply, &c. This information is analysed and summarized at Head Office Wellington, and should become increasingly valuable as the years go by for the purpose of estimating future production when required, and providing information on a number of points connected with the industry.

"The second point on which the assistance of departmental officers will be of value is their co-operation with the District Council Organizers, in advice and service to pig clubs. Each officer can take over three established clubs, visit them in the ordinary course of his duties, and provide them with advice or information when required.

"*Housing and Feed-supply.*—From the reports of field officers it is very evident that deaths from birth to weaning, winter deaths, and rejections at the works still constitute the major sources of loss in the industry. From their reports, also, numerous cases are noted of the elimination of this waste by attention to houses and sanitation. The total elimination of pleurisy and winter deaths, accompanied by the reduction of rejections at the works to less than 1 per cent. of all pigs slaughtered, are frequently reported from many different localities where new accommodation has been erected and where attention has been given to sanitation.

"The question of the kind of accommodation appears to be of much less importance than the broad principle of keeping the pig separated from his own excreta, and providing draught-proof houses that achieve this dual purpose either as sties, open-air pens, or fattening houses. Many new layouts of each kind are now in use in different localities.

"*Feed-supply.*—While housing and sanitation is the key problem to the industry, the provision of a cheap and adequate feed-supply still remains the most obvious and acute one to the individual producer. Although this department, through its field officers, strongly recommends the use of small quantities of the best-quality meals, at present prices, for the purpose of producing good litters or supplementing a failing milk-supply for pigs that just require finishing, the fact remains that at New Zealand prices of pork and bacon high-quality grain can be used in quantity only when the price is not greater than about £6 10s. per ton. Where roots can be grown profitably, when costed to pigs at 5s. per ton, a feed-supply is available from this source, at £2 10s. per ton (10 tons roots equivalent to 1 ton of feed), and this along with small quantities of milk, meat-meal, or grain is the only basis of the £3 per cow return that is now being obtained from pigs by a number of progressive producers.

"*Co-ordination of Research Work.*—A start has been made with research work on winter-feeding problems, feed factors influencing growth-rate and carcass-quality, litter-feeding trials, &c., at Ruakura State Farm. Details of what has been done there will be found in another section of this report.

"The inheritance of length and other factors influencing carcass-quality are being investigated at Massey Agricultural College.

"The problems of disease and health of pigs generally are being investigated at Wallaceville, and with the completion of facilities there in the near future it is hoped that a more intensive survey will be possible. It is hoped to co-ordinate the research work that is being undertaken at the above institutions, at Lincoln College, and at all other points where research can be carried out, and by this means cover all the points that require investigation."

DAIRY INSPECTION.

Increased activity in the work of dairy inspection is resulting in a decided improvement in the hygienic standard of dairies in many centres. The work of dairy inspection, which must be regarded as an important public health function, is one requiring unremitting attention on the part of the inspecting officer, and calls for a large amount of instructional service. In the inspection of cows in registered herds supplying milk for household use the tuberculin test is applied in suspicious cases, and many producers request the application of the test to the entire herd. The position is not, however, satisfactory, and the introduction of compulsory tuberculin testing of all cows supplying milk for household use in the Dominion is overdue. A public milk-supply from a tubercle-free source is strongly advocated as an important public health advancement.

LIVE-STOCK STATISTICS.

In 1937 sheep returns, collected as at the 30th April, showed that sheep flocks in the Dominion increased by 1,192,114 to a total of 31,305,818. An increase of 663,116 occurred in the number of breeding-ewes. The number of sheepowners has increased by 587 to a total of 31,177. The number of cattle in the Dominion as at the 31st January, 1937, increased by 135,023 to a total of 4,389,101. The number of dairy cows within the total shown decreased by 15,983 to a total of 1,935,524. The number of pigs in the Dominion as revealed in the 1937 enumeration was 802,419, a decrease of 6,044 on the previous year's figures. Horses show an increase of 1,629 to a total of 277,799.