

Selection of Breeding Sows within the Herd

THE normal practice on New Zealand dairy farms for replacement of breeding sows is to save gilts for breeding from the pigs in the fattening pens. This article by A. Longwill, Superintendent of the Pig Industry, Department of Agriculture, Wellington, deals with the main points in making this selection.

MOST pig producers who breed their own pigs replace sows by selecting likely looking gilts from the baconer pens. Provided the existing breeding stock are sufficiently good and a good purebred boar has been used, there is much to be said for this method of herd replenishment. There are, however, a number of points to be watched if successful results are to be expected.

The essential qualities wanted in sows are prolificacy, good milking ability, and good mothering temperament. The progeny must be rapid growers and efficient converters of their food into meat, and the carcasses produced must be of the type to yield the maximum of high-value cuts.

The farmer who has studied the breeding of his dairy herd and methods of testing and selecting for improved performance will realise that effective methods of selection cannot be based on guesswork or even observation combined with memory, valuable as is the latter. Testing of breeding stock and careful recording of performance, if properly employed, will play a bigger part in the improvement of the general standard of performance of the breeding herds in New Zealand than any other factor.

Performance Tests

Methods of testing performance in pigs available include litter recording and carcass testing, the latter taken in conjunction with rate of growth. The operation of these schemes and their importance in pig improvement were described in the December 1951 issue of the "Journal". Though these schemes, if used intelligently, can be of assistance to the pig raiser within his own



The home breeder can make selection of gilts for the breeding herd from the pigs in the baconer pens. Litter records and records of weight gain and carcass quality can assist the breeder in making the selection.

herd, considerable development, particularly of testing for efficiency of food conversion and for carcass quality under standard environmental conditions, will have to take place before the schemes can be of very great value in improving the herds of New Zealand. This is because, nationally, herds can be improved chiefly through boar selection, and it is only when the progeny of various boars can be compared under uniform conditions that a logical method of boar selection can be followed.

Meantime the home breeder by recording the performance of all the sows in a herd and their progeny to pork or bacon weight can use these tests to select replacement gilts. A minimum

standard of performance of 9 piglets born and 8 reared with litter-recording weights of 100lb. at 3 weeks and 300lb. at 8 weeks should be set and adhered to rigidly. If this standard cannot be achieved, the existing breeding stock or the management of them is at fault and this must be remedied first. It is not a sufficient criterion for selection that a sow should have put up one litter record of this standard. A sow if reasonably well managed should show that she is capable of producing up to this standard regularly and over a long breeding life.

The additional tests of efficiency of food conversion and final carcass quality should be superimposed on the initial litter recording to give a complete picture on which to base selection. To test efficiency of feed conversion strictly it would be necessary to record carefully every pound of feed used and the gains made, but for practical purposes at the moment rate of gain can be taken as a rough guide on the farm. Rate of gain and carcass quality can be recorded through the carcass-quality evaluation scheme. Representative pigs from individual litters could also be entered in carcass competitions, when the full carcass score can be obtained.

Lifetime-performance Records

The keen breeder, particularly the pedigree breeder, could well go to the extent of keeping a lifetime-performance record for each sow in his herd. Copies of a form suitable for recording this data may be obtained from the Department of Agriculture.



Gilts should be selected when they are between 22 weeks and baconer weight and should be fed on to make further growth without becoming overfat.