

CANTERBURY CHAMBER OF COMMERCE
AGRICULTURAL BULLETIN

**Pig Management: Disease Prevention
and Housing**

Prepared by the Canterbury Agricultural College, Lincoln.

Bulletin

CHRISTCHURCH, APRIL, 1940.

No. 129.

Not all aspects of pig management can be dealt with in the space of a single bulletin, but the most common and most important defects in management, as indicated by the state of a large proportion of the pigs brought to Canterbury Agricultural College for examination are dealt with hereunder. A piglet recently sent in for examination reflected the state of affairs which exists on many farms where pigs are kept. The little fellow was sadly stunted, bearing out the statement of the owner that he had not been thriving. A cursory examination showed him to be carrying large numbers of lice, a state which in itself was sufficient cause for his unthrifty condition. The pig louse is one of the external parasites which may be classed as "fortunate." It gains its livelihood with a minimum of exertion and without killing or transmitting to its host any disease. The result is the farmer is inclined to permit the louse to continue feeding on his pigs. The method of eradication is simple, cheap and effective, and consists of giving the pig a liberal coating of waste or fuel oil. Where large numbers of pigs are kept and particularly where many pigs are bought in, the provision of a dip similar in design to the smaller type of sheep dip is an essential part of the farm equipment. The dip is partly filled with water over which is floated a layer of oil and the pigs are swum through this mixture. A complete coating of oil ensures the destruction of all the lice.

A postmortem examination of the pig revealed an even worse state of affairs. His internal condition was such that considering the severity of his afflictions he was actually doing well to have been alive. His ability to make use of the small quantity of food he had

been tempted to eat was being interfered with owing to the intestinal round worms. Even more serious than the presence of these internal parasites was a bacterial infection of the intestines which thoroughly deserves the awe-inspiring title of "necrotic enteritis." Either of these troubles will play havoc with a young pig; combined they ensure that their host has no hope of thriving. The chest cavity was in no better condition than the digestive system and both the chest walls and the lung tissues showed signs of recent inflammation—pleurisy and pneumonia.

An examination of the blood served to confirm the obvious conclusion that the pig was lucky to be alive. Blood tests showed him to be suffering from severe anaemia, no doubt, in part at least, due to the combined effect of the various ailments mentioned.

This pig is but an example of many which are inspected each year at the request of farmers who complain that their young stock are unthrifty, and who in many cases will offer as an explanation that the boar is no good, or that the sow never rears a thriving litter. Implied in the explanation is the suggestion that they are unfortunate in having breeding stock which are constitutionally weak and lack the ability to make profitable use of the food supplied. The annoying feature of the presence of these ills is that all of them are far more easily prevented than remedied. With this aim in view a national instructional service is available through the pig clubs and district pig council to all farmers who keep pigs.

Profitable pig keeping is based on turning relatively valueless food-stuffs into valuable pig meat and the efficiency with which this can

be done depends upon the management of the pig herd. Prevention of most of the above detailed troubles can largely be brought about by suitable improvements in feeding and housing.

Previous bulletins have stressed the necessity for regular twice yearly farrowing of sows, and of the importance of large litters which make maximum live weight gains. Because our attainments still fall far short of our aims, and for the sake of the pigs which still have to exist under the conditions giving rise to the troubles already described, it is desirable to stress those points of management which make for increased monetary returns combined with the satisfaction and pleasure of possessing healthy, thriving animals.

The most generally neglected phase of management is that connected with the housing and the environment of the pigs; and it is defects in these aspects which were the most important cause of the illnesses of the pig examined.

On farms where pigs are bred, the farrowing unit and its surroundings are of major importance. The principles involved in the construction of the farrowing house demand that the sow shall be under control during the critical farrowing period; that she be subjected to a minimum of disturbance during farrowing and for the few days which follow; that the new born piglets receive a maximum of protection from the sow and the elements; that there be a grass run-out available when the piglets are ready to take advantage of it and that the piglets be fed separately from the sow as soon as they are ready to feed from the trough.

During recent years designs for accommodation which answers all these requirements have been freely distributed and although these designs may differ in detail the following special points are common to them all. The house should be detached and accompanied by a hurdle-enclosed feeding pen, having a concrete floor and giving access to a grassed run. The interior of the house should have a rail so placed that it is impossible for the sow to lie with her back against the wall. The detached house ensures freedom from disturbances which are unavoidable when farrowing sows are surrounded by

pens of other pigs. A farrowing rail serves to give a measure of protection to the piglets and helps to minimise farrowing losses. The hurdle pen provides a convenient feeding place, besides giving full control of the sow at all times. In addition a hurdle division of the pen provides a "creep" in which the piglets can be fed without interference from the sow. The grass run gives some grazing for the sow and a measure of protection from anaemia for the piglets.

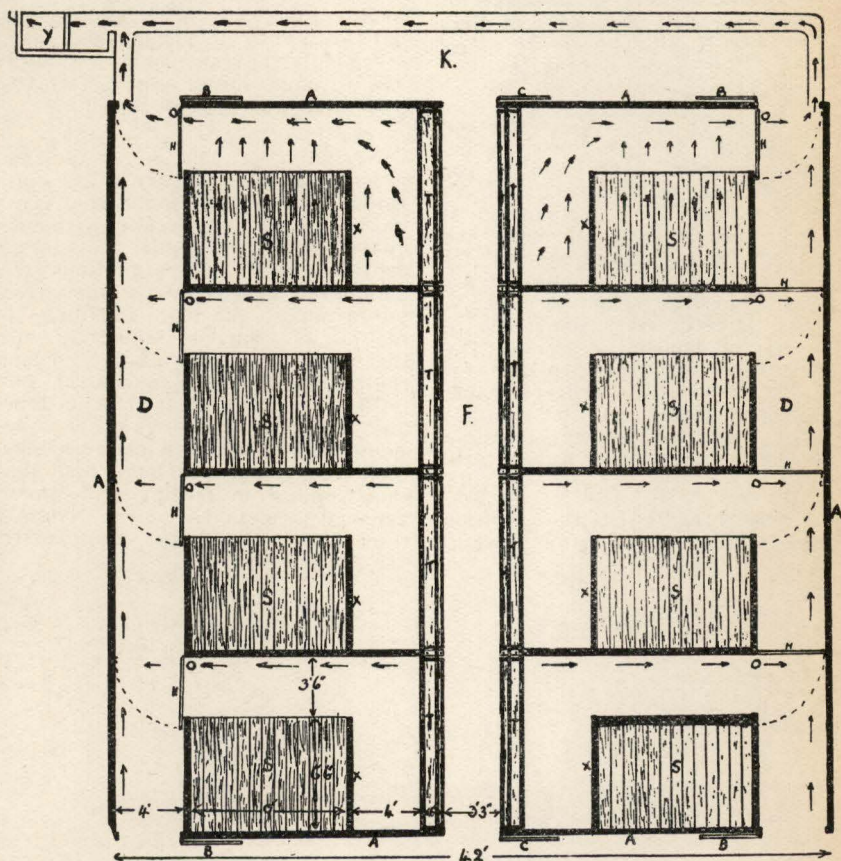
Such a farrowing unit has everything to commend it, providing as it does, for a small cash outlay, control of the sow during farrowing so that assistance may be given readily if required; freedom from disturbances during farrowing; protection for the piglets with the reduction of farrowing mortality; and creep feeding of the litter so that maximum weights can be obtained.

For the most part the New Zealand sow leaves little to be desired from the point of view of prolificacy but the management falls short when expressed in terms of number of pigs weaned compared with number of pigs born. The production of healthy, heavy-weight weaner pigs is the completion of the first step in profitable pig production. If the management is efficient these pigs will pass through the weaning stage without a check and will continue making profitable daily gains which give pleasure when expressed in terms of weight or cash.

The housing for these weaned pigs also requires consideration. In order to secure the best results a separate fattening unit is desirable. The type known as the "Danish" house is the modern standard. Its advantages include ease of feeding and cleaning, and control of the house temperature at all times of the year, thus giving maximum efficiency, from the point of view of both the feeder and the animal. The use of this type of house is rapidly developing in New Zealand. Pig-keepers are realising the necessity for efficient equipment if the results are to be profitable. Particularly is this the case in areas where rapid changes in weather conditions are common, where soil and rainfall conditions make open air fattening impracticable and where winter weather conditions are relatively severe. For

example, except in the drier and warmer portions of the North Island the open air or "Waikato" system of pigkeeping is rapidly giving way to an indoor system using the "Danish" house with some New Zealand modifications. Such a house does not resemble

the old time "sty" on stilts which it is hoped has disappeared forever from New Zealand farms. A complete Danish fattening unit, while usually costly in initial outlay, has so many advantages that practical farmers who have ventured in this direction consider the expense one



GROUND PLAN OF DANISH HOUSE, EIGHT PENS,
TO ACCOMMODATE 70-80 BACONERS.

Key to Letters:

- C—Doors to feeding passage.
- F—Feeding passage.
- D—Dung passage.
- H—Dung passage gates.
- T—Troughs
- K—Concrete yard outside of building.
- Y—Sump arrows showing direction of fall.
- S—Sleeping boards.

Note:—This shed can be built to accommodate a smaller number of pigs by reducing the number of units or pens, or building on one row only. The whole structure is roofed over and enclosed.

of their best investments.

A popular modification of the Danish house is one known as the "Neilson" house developed by Mr E. P. Neilson, Supervisor of the Wellington District Pig Council. This type provides complete indoor housing except during feeding periods. Feeding takes place in an attached concrete and protected feeding pen. It costs a little less than the "Danish" but appeals to those farmers who consider that the fattening pig needs sunshine.

A cheaper form of fattening house known in the North Island as the "Jensen" house and in the South Island as the "Croucher" house has much to recommend it on the score of both efficiency and cost, but is not recommended for use where winter conditions are severe. The illustration accompanying this bulletin gives some idea of the type of housing described. Detailed plans and specifications for both farrowing and fattening houses and layout will be supplied to any interested farmer on application to Canterbury Agricultural College.

Looking broadly at the position to-day it is no exaggeration to sug-

gest that the quality of management and not the quality of stock is the major factor limiting profitable returns.

Preventable diseases resulting from unsatisfactory housing conditions and infected soils and pastures are the cause of economic wastage. Nutritional disorders associated not only with bad feeding but also with inefficient equipment are similarly responsible for heavy loss through actual death, unthriftiness and wastage of food.

No animal can be an efficient productive unit unless it is provided with living conditions enabling it to do its job, and with adequate feed. Not until the pig is provided with such conditions will maximum returns be obtained from pig-farming. Efficient handling of the pig is primarily bound up with the provision of suitable housing equipment. Every management factor is dependent upon this need being fulfilled. Those who are responsible for advising farmers upon their many pig problems find that shortcomings in feeding and management methods are directly traceable to inefficient equipment.

Copies of this Bulletin may be obtained from the Secretary, Canterbury Chamber of Commerce, P.O. Box 187, Christchurch.