

**CIHM
Microfiche
Series
(Monographs)**

**ICMH
Collection de
microfiches
(monographies)**



Canadian Institute for Historical Microreproductions / Institut canadien de microreproductions historiques

© 1997

The copy filmed here has been reproduced thanks to the generosity of:

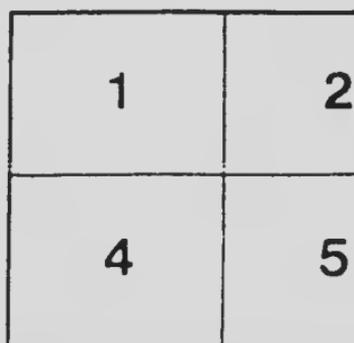
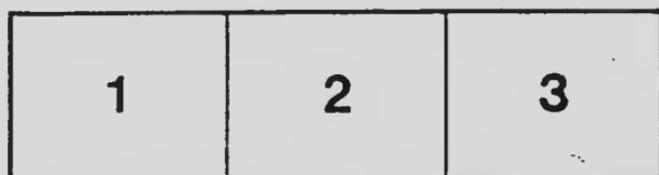
Library
Agriculture Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the last page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol \rightarrow (meaning "CONTINUED"), or the symbol ∇ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:



L'exemplaire filmé fut reproduit grâce à la générosité de:

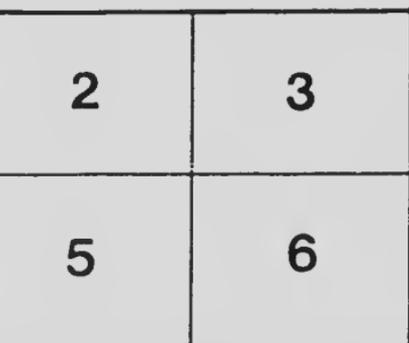
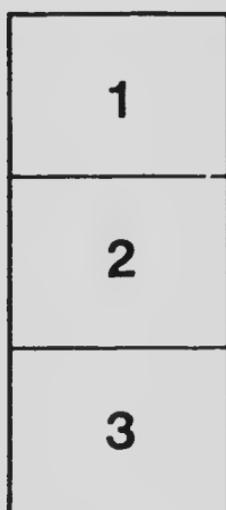
Bibliothèque
Agriculture Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de la condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole \rightarrow signifie "A SUIVRE", le symbole ∇ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.



MICROCOPY RESOLUTION TEST CHART

(ANSI and ISO TEST CHART No. 2)



4.5



5.0



5.6



6.3



7.1



8.0



9.0



10



11.2



12.5



14



16



18



20



22.5



25



28



32



36



40



APPLIED IMAGE Inc

1653 East Main Street
Rochester, New York 14609 USA
(716) 482-0300 Phone
(716) 288-5989 - Fax

THE SELF FEEDER FOR HOGS

**FEEDING MORE HOGS USUALLY MEANS MORE LABOUR.
THE SELF-FEEDING SYSTEM ALLOWS FOR INCREASED
PRODUCTION WITH DECREASED EFFORT.**



**Frequent Change in Attendants may cause Trouble with
Hand-Feeding.**

Over-Feeding is Wasteful and Dangerous.

**The Regularity and Uniformity of the Self-Feeding System are
Desirable Features.**

**IMPORTANT:--The Self-Feeder does not remove ALL the Work
from Swine Feeding.**

DOMINION EXPERIMENTAL FARMS

J. H. GRISDALE, B. AGR., DIRECTOR

G. B. ROTHWELL, B.S.A. FIRST ASSISTANT ANIMAL HUSBANDMAN.

What is a Self-Feeder?

Briefly, a self-feeder for hogs consists of a box or hopper, so constructed that when filled with meal it will automatically deliver, or keep continually before the pigs, in troughs, a certain amount of dry feed.

Where Automatic Feeding May Prove an Economy.

A self-feeder will hardly prove economical where two or three pigs are kept. It will be obviously useless where garbage or refuse is the main food item. Further, where large quantities of dairy by-products are available and comparatively few pigs fed, the use of a self-feeder would not be indicated.

Where more than ten pigs are kept, however, the labour-saving feature warrants consideration. To the swine grower, who contemplates reducing his output on account of labour scarcity, the self-feeder is to be recommended.

Requirements of a Good Self-feeder for Swine.

The self-feeder to be successful must be cheap, strong, capacious, portable, easy to construct, weather-tight, easy of regulation for different textured meals, and, most important of all, so arranged that the contents will feed into the troughs with minimum stoppage, caused by the blocking of the meal in the hopper. Further, the troughs must be constructed to ensure the minimum amount of waste such as might be caused by the animals nosing the meal over the sides or soiling it by standing in the troughs. While several plans of feeders may be recommended, the one herein illustrated and described has been found to include nearly all of the desirable features mentioned.

Advantages of the Self-feeder over Hand-feeding Methods.

1. Saves over 60 per cent of the labour. 2. Reduces waste of feed to the minimum. 3. Prevents digestive troubles due to overfeeding—the pigs having full access to the meal at all times, and therefore eating in small quantities frequently instead of suddenly overloading the stomach two or three times in the day. 4. Many pigs may be fed from small trough space; they do not all feed at the same time. 5. All individuals have an equal chance; the weak pig benefits accordingly.

Correct Conditions for Using the Self-feeder.

Place the feeder on a platform or floor that will remain clean during wet weather and prove accessible to the pigs at all times. Individual platforms placed on each side of the feeder, 3 feet wide, the length of the trough, and made of 2-inch plank, will be found useful. If desired, these may become an integral part of the outfit, feeder and platforms being built on the same pieces. The latter arrangement tends to unwieldiness. Provide shade of some sort, either trees or a rough shed. While this system of feeding will prove relatively economical in dry lot feeding where green food, skim-milk, or water are supplied daily, the maximum efficiency will be reached where the feeders are placed in a good clover, alfalfa, rape, or grass pasture. In any case, dry lot or pasture, with or without milk products, fresh water should always be supplied, preferably running, or from some self-watering device, regularly and frequently filled.

When to Use and When to Avoid the Self-feeder.

Where plenty of skim-milk or other milk by-product is at hand, wean young pigs in the regular way to trough feeding. When they are nine or ten weeks old, introduce the self-feeder. Continue hand feeding twice a day, gradually reducing the slop until at three months the pig obtains all his meal dry. An abrupt change in feed will show a corresponding abrupt and undesirable change in the condition of the pig.

WEANING LITTLE PIGS ON THE FEEDER.

Where little or no milk by-product is available, surprisingly good results may be obtained with the feeder. Delay weaning as long as possible. For two or three weeks before weaning, place a small feeder (an old box may be

improvised) in a corner of the pen or paddock. Arrange a creep which admits the little ones only. Feed oat meal, ground oats, middlings, shorts, etc., in the feeder, and if possible try to procure a little skim-milk, when the sow is finally removed. Failing this, a little dry tankage may be fed separately.

MAY BE USED THE YEAR ROUND.

The feeder, while designed particularly for outdoor or pasture feeding, may be adapted to pen or yard feeding in winter, provided it is placed where snow and ice will not interfere with the troughs.

With all classes of finishing hogs, the advocated use of the feeder needs no qualification. *For young breeding sows* during their first fall and winter the self-feeder is recommended. Use bone- and muscle-forming meals and discontinue using the feeder at the first sign of overfatness. *In general, avoid self-feeding with mature breeding stock* unless bulky foods, such as ground alfalfa, etc., are available.

WHERE THE SELF-FEEDER MUST BE RESTRICTED.

Frequently, young self-fed pigs on pasture neglect the green food for the more palatable and easily obtained meal. Prevent this by arranging two hinged covers which may be dropped over the troughs. By occasional use of these, for short periods, the pigs are forced to forage.

Meals and Mixtures for the Self-feeder.

From a mechanical standpoint, any mixture of whole or ground grains or mill feeds may be successfully self-fed. The grain ration may be fed mixed or with each component part separate, allowing the pig to choose for himself. He can do this. Such a plan requires partitions in the feeder. For young pigs or shoats, any of the following mixtures will be found suitable provided all hulls are fairly finely ground:—

1. Shorts or middlings, fine ground oats, fine ground barley or corn.—
equal parts.
2. Shorts, or middlings, 4 parts, any of above grains 4 parts, ground peas
2 parts.
3. Shorts or wheat 2 parts, barley 2 parts, peas 1 part.

With any of the above mixtures fed to young pigs, skim-milk may be profitably fed. Where such can be obtained, the addition of tankage, meat, or blood meal is recommended. Tankage may best be fed from a separate feeder or by partitioning off a small section of the regular structure. Allow the pigs to meet their own requirements.

The Construction of a Self-Feeder.

(See cross section).

Base.—The feeder should rest upon two pieces 2 inches by 4 inches running lengthwise, placed flat. These may act as runners. On these lay pieces of 2 inches by 4 inches to carry the structure.

Sides.—Make the sides of 2 inches by 3 inches sheathed inside by $\frac{3}{4}$ -inch dressed lumber, as shown.

Gate.—Two arrangements of the feed-gate are shown. *This is the important part of the feeder.*

NOTE.—To ensure the constant feeding of the meal, some means of agitation is necessary. Otherwise the contents will block close to the bottom.

Make the iron bands (two on each side) connecting the control slide at the bottom, with the thumbscrew at the top, of light strap-iron $\frac{1}{8}$ inch thick by 1 inch wide. When the meal ceases to flow, the pigs naturally root or nose toward the source of supply, and being able to move this flexible slide, which in turn presses upon and breaks the meal blockade—they are rarely left with a "dead" self-feeder. To prevent the pigs forcing the board too far in, it is, of course, necessary to place a cleat inside at either end of each slide. Allow about $\frac{1}{4}$ -inch play between the slide and the cleat.

The second arrangement shown is simple, consisting of a section of the gate hinging inward. This the pigs may root against, causing it to break any meal stoppage. Possibly the first described arrangement will be found most satisfactory.

Feed Troughs.—The front of the feed troughs consists of one piece 4-inch by 4-inch (two pieces 2-inch by 4-inch). Two pieces 2-inch by 2-inch will be better for young pigs. From this front are placed 2-inch by 2-inch divisions, 12 inches apart, running up to a 1-inch by 3-inch piece laid along the sides as shown. For general use, a trough width of not more than 9 inches is recommended.

Roof.—The roof is laid on 1-inch by 3-inch battens, and covered with ready roofing. The hinging arrangement shown is simple, and prevents leaking at the peak. A prop should be supplied to hold up the door, or roof when filling. It is best to continue the overhang of the cover so that the drip may not affect the troughs in wet weather.

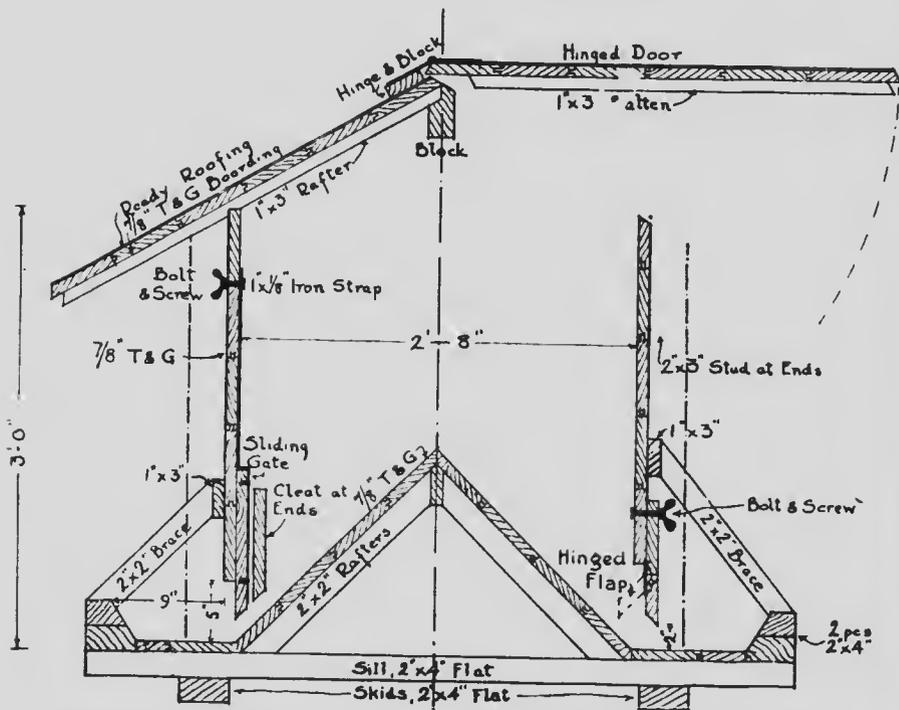
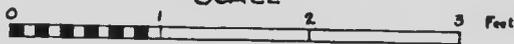
Side.—The width is shown in the drawing. The length will depend on number and size of the pigs to be fed. A 6-foot feeder (12 feet of trough) is a commonly used size, and will feed up to twenty-five young pigs.

Cost.—Built of new lumber the cost should not exceed \$10. Use dressed lumber preferably, and give the exterior a coat of paint.

Provided the requirements enumerated are met, changes in details may be suggested by the ingenuity of the builder. The photograph shows a home-made feeder, one of many used at the Central Experimental Farm, and in design similar to that already described.

SELF FEEDER

SCALE



SHOWING TWO SATISFACTORY ARRANGEMENTS OF THE CONTROL SLIDE OR GATE.

