

# EFFICIENT FARMING

## CORN VS. BARLEY FOR BACON HOGS.

In order to determine the respective values of barley and corn meal for the feeding of bacon hogs a test was conducted at the Central Experimental Farm during last winter, in which two lots of Yorkshires and two lots of Berkshires were fed rations similar in character except that the ration of one lot of the former and one of the latter was corn, while the other two lots were fed barley.

The hogs were about three months of age when placed on the test and averaged about 60 pounds in weight. This feeding test covered a period of ninety days. For the first thirty days the meal ration included one-third barley or corn; for the second thirty days, one-half barley or corn, and for the remaining thirty days, two-thirds barley or corn meal. The other feeds included oats, bran, shorts, 3 per cent. oil meal, 2 per cent. tankage and skim-milk.

During the first 30 days the Yorkshire and Berkshire lots on barley meal failed to make as great gains as the corn-fed lots, this being, in part at least, due to the fact that both lots on barley went off their feed for a few days, it being more noticeable with the Yorkshire lot. No adequate explanation could be given beyond that the quality of the barley meal might have been at fault—and this was not noticeable from an examination of the feed.

The results from the test were as follows:

Period 1— 30 days:	Average daily gain per hog.	Barley meal eaten per lb. gain.	Corn meal eaten per lb. gain.	Barley milk eaten per lb. gain.	Corn milk eaten per lb. gain.
Yorks, corn...	1.97 lb.	2.21 lb.	5.56 lb.		
Yorks, barley...	.62 lb.	3.09 lb.	8.58 lb.		
Berks, corn...	.93 lb.	2.00 lb.	6.42 lb.		
Berks, barley...	.68 lb.	2.33 lb.	4.85 lb.		

During this period the hogs on corn made greater gains, and also more economical gains, than the barley-fed hogs.

Period 2— 30 days:	Average daily gain per hog.	Barley meal eaten per lb. gain.	Corn meal eaten per lb. gain.	Barley milk eaten per lb. gain.	Corn milk eaten per lb. gain.
Yorks, corn...	1.14 lb.	2.55 lb.	5.31 lb.		
Yorks, barley...	1.27 lb.	2.46 lb.	4.36 lb.		
Berks, corn...	1.07 lb.	2.62 lb.	5.60 lb.		
Berks, barley...	.97 lb.	2.47 lb.	4.12 lb.		

The results for the second period showed barley in a much more favorable light, the Yorkshire lot on this feed making greater as well as more economical gains. While the Berkshires on barley made the lowest gains, they, however, made the most economical gains. At the end of this period it was decided to discontinue the test with the two Berkshire lots as these were rapidly developing into the type of hog commonly known as shop hogs, which were unsuitable for the production of bacon carcasses.

Period 3— 30 days:	Average daily gain per hog.	Barley meal eaten per lb. gain.	Corn meal eaten per lb. gain.	Barley milk eaten per lb. gain.	Corn milk eaten per lb. gain.
Yorks, corn...	1.56 lb.	2.54 lb.	3.83 lb.		
Yorks, barley...	1.50 lb.	2.63 lb.	3.98 lb.		

A comparison of the Yorkshire lots for the total period of ninety days shows the corn-fed Yorkshires to have made an average daily gain of .12 of a pound greater than the barley-fed Yorkshires, but if the first period of 30 days is eliminated as abnormal, the latter lot shows a slightly greater daily gain—.03 of a pound per hog daily—and this lot made the gain with the same meal consumption per pound of gain and .8 of a pound less skim-milk than the corn-fed lot.

The meal ration did not seem to be suitable for the proper requirements of the Berkshires, as previously stated, but apparently was quite suitable for the Yorkshires. The corn-fed Yorkshires possessed more bloom and were in slightly better flesh than the barley-fed lot at the end of the test. Both these lots produced hogs suitable for the production of bacon carcasses.

In concluding it might be well to add that barley is slightly less palatable to pigs than corn, but when fed in mixtures with other ground feeds this is to a great extent overcome. It has the great advantage of being home-grown, while the greater part of the corn which is fed must be imported and the economy of feeding this latter cereal will depend on the market price.

## HOW CAN THE FARMER DETERMINE THE BEST VARIETY TO GROW?

The Experimental Farms throughout Canada may be relied upon to give valuable advice with regard to the most promising variety of grain

to grow in the district or province in which a given farm is located.

The districts in Canada, however, are so immense that only general information regarding the suitability of a variety for a given district can be given by an experimental farm. This is especially true when a farmer has peculiar conditions on his farm. It then becomes imperative that he make a further test under his own conditions in order to determine the sort which suits those conditions most satisfactorily.

It often happens that some physical peculiarity of the district presents a problem that does not arise in a place 4 or 5 miles away. Rust may be had in a small area; new land may be coming under cultivation; it may be hard to get varieties with sufficient strength of straw on heavy, wet, peaty soil. All these are local problems that the individual can solve for himself in the following way: Write the nearest experimental farm and obtain information as to what varieties are likely to be most suitable; then purchase at least five pounds of each of these. A greater quantity, however, would be better. Five pounds is sufficient to sow one run of seeder about 18 to 25 rods long. If it is intended to seed down grass and clover with the grain, it is best to block the outside spout on each end of the grain drill and drive so that the wheel follows the second drill mark instead of the first as is normally the case. In this way the seeder will cover all the ground with grass seed and leave a 14-inch path between the varieties which are seeded.

During the growing period, observations should be made as to the behaviour of the varieties under test, so that by harvest time a fair idea may be gained as to which variety appears to suit local conditions best. If considered necessary, in order to be sure of the yield, a few strips—from 5 to 10 are recommended—each one rod long, may be cut out of chosen rows in each plot. The heads obtained from these strips may then be threshed by hand and the grain weighed. The weight of grain so obtained from one plot may be compared with that from another as further evidence of the relative standing of the sorts tested. It does not take long to cut the heads from a strip one rod long, nor does it take long to thresh, and for the little trouble involved, one is able to determine what variety is most likely to give greatest returns under the conditions considered.

The experimental farms are always willing to give advice and whenever possible to co-operate in solving local variety problems. Do not hesitate to write to the nearest Dominion Experimental Farm when you need advice on a variety for your district.

## Marketing the Potato Crop.

The potato grower should cater to the wishes of the most particular and exacting customers. He should furnish a choice product in a most attractive form and should carefully study the demands of the market he wishes to serve. For the best prices the potatoes should be uniform, sound, smooth and of good table quality, whether selected by the pound, the basket, the bushel, the bag, the barrel or the car load. The commercial potato grower should not be confined to the local market, but should be in a position to put his potatoes on the best market available either through his own efforts or through the medium of a co-operative association. It sometimes occurs that of the price paid by the consumer for a bushel of potatoes about two-thirds are required to defray the cost of transportation and of distribution, and one-third is left for the grower. This is not as it should be. Undoubtedly one of the best remedies for such a condition of affairs is co-operation on the part of the growers themselves.

To treat dried beef that has become dry, wrap the dried beef up in a big cloth that has been wrung out of fresh water. Dampen the cloth every day or so and the dried beef will become moist again.—Mrs. I. R. L.

Pork sausage should be about three-fourths lean and one-fourth fat. Grind thoroughly and with every fifty pounds of meat mix one pound of salt and two ounces of pepper. If sage is desired use about three ounces of sage. Any other seasoning, such as garlic or ginger, may be added to suit the taste after grinding. Mix the seasoning into the meat thoroughly and either stuff into casings, or pack in jars, cook through and cover with hot lard. The loin may be sliced and fried down the same as the sausage, or canned.

## The Profitable Capon.

There is one part of the poultry industry that helps to boost the yearly income. I refer to castrating all surplus cockerels, after selecting those wanted for breeders.

The flesh of a capon remains as tender and sweet as that of the spring chicken. As an experiment I have raised capons from most of the breeds in this country with excellent results from all; even the small Leghorns make nice plump capons, weighing five or six pounds.

I have found just one exception to this statement, namely, the Black Minorca. Like all capons, they grew larger than a cockerel of the same age, but it seems impossible to fatten them—and a capon must be fat to bring top prices. Capons from this same breed were simultaneously tried out on a nearby farm with no better results. Also, I have found by exact comparison, that capons raised on farms, where the birds have free range, develop much faster than those grown in small enclosures. They will roam around very much like turkeys, and like turkeys, pick most of their feed. It is easier to raise capons than it is to raise turkeys.

For best success in the work of castrating, care must be given the cockerels beforehand by shutting them in from twenty-four to thirty-six hours without food and water; then with good light and the best instruments obtainable, the operation is a simple one.

When well-fattened and dressed (dry picked) capons will bring very close to turkey prices. Around Easter they are often quoted a few cents above turkey prices. A capon, like a cockerel, is not full-grown until a year old, but at the age of ten months if well-fatted, capons will bring from \$2 to \$4 apiece, according to their size and where they are marketed. I would like to know, what other chicken of that age will equal that, with exception of the breeders and fancy stock.

A friend of mine on a farm near here, who raises Barred Plymouth Rocks, tells me that last season there was an increase of \$60 in her poultry profits, because she sold capons instead of roosters. Any woman can do likewise.

I must also mention the usefulness of capons as foster-mothers; they will take care of little chicks as well as any hen and do not leave the chicks as the hens sometimes do. If the chicks, when two or three weeks old, are given to the capon, the hen will begin to lay in a few days, which also adds to the yearly profits.—T. K.



## Morning Callers.

First Fido came and sat upon  
The end of Eric's bed,  
Without his usual bark of joy,  
But with a growl instead;  
"I never had that meaty bone  
You promised me," he said.

Next Spot, the rabbit, scrambled up  
And sat by Fido's side;  
He rubbed his whiskers, shook his  
head,  
And sorrowfully sighed:  
"I haven't had that cabbage leaf  
You spoke about," he cried.

Then Fluff, the kitten, jumped up, too,  
And it was sad to see  
The looks of sympathy that passed  
Between the doleful three:  
"I haven't had a drop of milk  
For two whole days," said she.

The parrot flew across the bed  
And sat upon the rail;  
He was the sort with feathers gray  
And with a scarlet tail,  
And to describe what Polly said—  
Well, words completely fail!

But anyhow, when he had done,  
Poor Eric gave a scream,  
And started up, with staring eyes,  
In agony supreme.  
And then he gazed about, and gasped,  
"It must have been a dream!"

Altho' 'twas very early still,  
He sprang out of his bed,  
And dressed himself at presto speed,  
Then down the stairs he sped;  
And ere the breakfast bell had rung  
His pets had all been fed!  
—Our Four-Footed Friends.

Nitrogenous foods are the frame builders. Carbonaceous foods do not build up the frame.

A small chopping block with a bail-like a bucket is my idea of a handy device. It can be carried about and placed where it is most needed when gathering kindling around a new building, or when trimming brush that has been pruned from the fruit trees. It is about as easy to make as anything you can imagine. Only things needed are the block, a piece of heavy wire for the bail, and two large staples.—R. S.

## HERNIA OR RUPTURE IN YOUNG ANIMALS

BY C. D. MCGILVRAY, M.D.V., ONTARIO DEPT. OF AGRICULTURE.

The term Hernia, or Rupture, is applied to designate a condition consisting of the protrusion of a portion of the intestine or bowel from the abdominal cavity through a normal, or wall, which protrusion shows its presence by a lump or tumor-like mass with the skin remaining intact as an enclosing sac or pouch-like covering. Two forms of rupture are commonly met with affecting young animals, and are designated by name according to their location. One, being situated at the navel, is termed Umbilical Hernia, or rupture of the navel (popularly known as breach at the navel) while the other is termed Scrotal Hernia, or rupture at the scrotum or bag containing the testicles.

### UMBILICAL HERNIA IN YOUNG ANIMALS.

In the case of Umbilical Hernia, or rupture at the navel, the condition generally appears a few weeks after birth. It consists of the protrusion of a portion of the bowel through the navel opening in the floor of the belly, the skin remaining intact, forming a covering sack or pouch. Its presence becomes noticeable by the appearance of a soft, round lump, or tumor-like mass at the navel. Should doubt exist as to whether the condition is actually one of rupture its true nature can be readily determined by placing the animal on its back and pressing and manipulating the lump with the hand. It will be found that the bowel can be returned to the abdomen, leaving a somewhat loose pouch of skin, and the aperture by which the bowel protruded can be felt as an oblong, or ring-like opening, thus distinguishing it from any other swelling. As soon, however, as the animal is allowed to regain its feet, the bowel once more protrudes into the sac of skin and the lump or tumor-like mass again appears at the navel. The size of the rupture varies from that of an egg to as large as a good-sized ball.

There appears to be a predisposition to the condition in some, the navel ring or opening being abnormally large and the tissues weak. This predisposition is present at the time of birth and subsequently the bowels become distended, or straining takes place as in constipation, a loop of the bowel is liable to be forced by the internal pressure out of the abdominal cavity through the dilated ring or navel opening.

Treatment—As a rule, rupture at the navel in foals and calves is not a serious condition, except when of large size. Those of small size tend to disappear in a large number of cases with growth and development of the animal. The young animal should first be placed on its back and the lump or tumor manipulated with the hand to return the protruding bowel into the abdomen. To prevent the bowel from again escaping, a pad or small cushion is placed over the navel opening and retained in position by a truss, or supporting bandage, such as a leather band or canvas girth encircling the body, fastened up over

the back, and prevented from slipping forward or backward by means of a breast band and breech band. The only objection to the use of a truss or bandage is that it may chafe the skin if not properly applied. In the case of small ruptures, a good blister applied to the skin around the navel has a good effect, as the swelling which it causes helps to close the opening and prevents the bowel from again escaping.

If the foal reaches the age of four or five months without showing any improvement, and the rupture tends to enlarge instead of decrease, it may require an operation to overcome it. The most common methods of operation are by means of wooden clamps, skewers, and ligatures. In applying these the foal must be placed on its back and care taken to have the bowel contents of the rupture sac returned to the abdomen. The skin forming the pouch or sack should then be grasped by the hand and drawn out as far as possible from the body, and the clamps, or ligature, fixed tightly and securely over the skin, close up against the navel ring or opening. The clamps or ligatures are then allowed to remain in position until they slough and fall off, together with the imprisoned skin and tissues.

This method of operation is also applicable in the case of calves and pigs and should be done early in life.

### SCROTAL HERNIA IN COLTS.

Scrotal Hernia, or rupture of the scrotum, affects male animals only, and may be present at time of birth, or appear within a few weeks thereafter. This form of rupture consists of the protrusion of a portion of the bowel into the scrotum or bag, together with the testicles. Its presence is noticeable by the increased size of the scrotum.

Treatment—While this form of Hernia often disappears with growth and development, and may in many cases not interfere with the health, nevertheless it is a source of danger in sometimes causing fatal colics, owing to the imprisoned bowel becoming strangulated.

The treatment of Scrotal Hernia in ordinary colts consists essentially of a surgical operation, the method usually followed being castration by what is known as the covered operation, which should be undertaken only by a veterinary surgeon. As a rule colts intended for work purposes, affected with this form of rupture, should be operated on early in life and, in most cases, before the animal is much over one year old, as the chances of successful results decrease with age, while in the case of foals and yearlings, the operation is invariably successful.

In the case of pure-bred colts valuable for breeding purposes, surgical interference is warranted only when the hernia is a source of danger to health. The best plan in such cases is to allow nature to take its course in the hope that with growth and development of the animal the hernia will become reduced.

## "GYPS" AND WOULD-BE AUTHORS

In most rural regions there are would-be authors and aspiring poets, though they do not all openly announce their great ambitions. To them, every magazine is an indication of the wealth to be made through writing, and every poem or new song an example that poetry still is a source of fame.

There are not many facilities in rural regions, except home study, for the necessary training the embryo author must have, for all successful authors must have considerable special training. This fact is well-known by a certain class of people who turn their wits into money, simply because they know human nature, and because some publishers encourage them by accepting their advertising.

They are the "gyp" correspondence schools and song publishing companies. This does not mean that all correspondence schools and song publishing companies are dishonest; simply that for every reliable one there are a half-dozen that are not.

The fake song publisher and the numerous companies that claim to teach the fine art of motion picture play writing in a few lessons are, usually, the most successful in their efforts to separate the beginner from his money. They hold out the lure of greater profits than other classes of literary work, which is probably the reason for their prosperity.

In many instances these concerns claim that "any one without previous experience can earn from \$50 to \$200 a week in the literary field," to get the prospective victim interested. It is but human nature to desire to ob-

tain wealth easily, so many otherwise intelligent farm people fall into the snare.

The bogus song publisher usually induces the victim to submit a song poem. Then he writes a very encouraging letter, predicting a great success for the song, and offering to publish it for a certain amount, say \$40. If the money is forwarded, a few copies of the song are sent the author; but few are the royalty cheques that the company predicted would follow the publication of the song.

The motion picture training courses usually adopt a ten-lesson course or some equally improbable method of training the would-be scenarist. They often mean well, and perhaps even believe they are doing a good work, but only a few of them can impart the necessary knowledge.

Perseverance and honesty of purpose, coupled with some common sense, will do more for the beginner than most courses. A study of the best authors is also invaluable. And it is well to remember that writing, like farming or any other business, will pay only into the treasuries of those who really work, and work hard. It is not the road to easy money, even if some smooth-talking agent does say so. So think it over.

The good producer has body type or capacity measured by its length, depth and width of body; a lean face, free from wrinkles; and a large, prominent eye. The head should be well balanced, broad and deep, with every line denoting strength. The skin should be soft and pliable and the shanks smooth and flat. Above all, the breeder should show no signs of sickness, but its personality should denote health, vigor, and interested activity.