

# FOR STOCK FARMERS, BREEDERS AND GARDENERS

## Fish Meat As a Source of Animal Protein

(Experimental Farms Note)  
The value of fish meal as a source of animal protein has been under experimentation for several years in the Dominion Experimental Farms Branch. Several experiments have been conducted at the Dominion Experimental Farm, Nappan, N. S., since 1924 to determine its value for bacon hogs. In 1924 it was found that fish meal compared very favourably with tankage in replacing skim-milk in the ration. Since that year a number of experiments have been conducted comparing fish meal with skim-milk.

Five experiments have been conducted on with two lots of pigs, one lot receiving fish meal and the other skim-milk, weaning to finish. The fish meal was fed to lot 1 at the rate of 8 per cent of the feed ration, while skim-milk was fed to lot 2, supplying as nearly as possible the same amount of animal protein as was fed lot 1. The average daily gain for the fish meal lot was 1.06 pounds, while the skim-milk lot averaged 1.12 pounds. The cost per pound gain was 7.87 cents and 8.40 cents for each lot respectively. Many experiments have been conducted with four lots of pigs as follows: Lot 1, skim-milk weaning to finish; lot 2, skim-milk to finish; then fish meal to finish; lot 3, skim-milk to three months; then fish meal after four months; lot 4, skim milk to three months; then grain ration only. The average daily gains in these experiments were 1.06 pounds, 1.04 pounds, 1.04 pounds and 0.94 of a pound, while the cost per pound gain were 7.87 cents, 7.96 cents, 7.96 cents and 8.40 cents for each lot respectively. With pork at 6 cents per pound live weight a comparison of lot 2 and lot 4 shows that 948 pounds of fish meal produced 365 pounds of pork. This gives fish meal a valuation of \$45 per ton, on the basis of the increased gains which may be attributed to the addition of fish meal to the ration. On the same basis, comparing lot 1 and 4 we find that 15,334 pounds of skim-milk produced 440 pounds of pork, giving skim-milk feed a valuation of \$3.40 per ton. Other cases superior to all others.

## Garden Queries

When an oleander fails to make flowers, it is usually because it has not had the required rest. They should get at least two months' rest, usually given in midwinter, when the plant is placed in a frost-proof, gas free cellar or other place where temperature and moisture favor a lay life. It may be advisable to lay the pot on its side, but you give it no water during rest period.

When the two months are over take the plant and go over it, cutting back to make it a shapely form as a tree or shrub, just as you prefer. Yours probably would be better for being severely cut back. Mix together one part garden loam, one part muck, with two parts of well rotted cow or horse manure, working together till it makes a fine, spongy mass.

With a pointed stick remove the old soil from about the roots. Put plenty of broken crock for drainage in the bottom of a pot a size smaller than the one you now have in it. Spread the roots well and pack the fresh soil tightly about them. Water generously. Its native haunts are swampy places. Watering is especially important during the flowering season. Flowers will drop off if the soil becomes too dry. Experiments have given fish meal a valuation ranging from \$8.80 to \$127.00 per ton and skim-milk a value ranging from \$4.40 to \$7.12 per ton.

Conclusions which may be drawn from experiments conducted may be summed up as follows:

1. Good quality fish meal, high in protein and low in oil, furnishes a valuable source of animal protein, providing the cost is reasonable.
2. Skim-milk still remains the most dependable source of animal protein, but when not available, fish meal may be used with good results.
3. Gains made by hogs fed on fish meal were practically equal to those fed skim-milk. During the winter months, crippling appeared to be slightly less apparent in the hogs receiving fish meal and the grading of finished hogs from the fish meal feed was equal to and in some cases superior to all others.

## Plants Need Food

Trees, shrubs, perennial flowers and lawns need periodic feeding if they are to realize their fullest beauty. Such food may have been applied last of all in the form of rotted stable manure to be worked into the ground as soon as it can be worked. This form of food not only supplies plant food, but aids in fitting the soil to retain moisture in area of the feeding roots, and in releasing the food materials present in the soil. Not all town gardeners are in a position to make use of this type of fertilizer.

Fortunately for the owner of a city or town home there are now readily available commercially prepared plant foods which are easy to apply, convenient to handle, not very expensive, and which, through experiment, have been shown to contain all the necessary elements for plant growth. This may be the type of plant food most practical for the city home owner to use and one which will serve his purpose to perfection.

Shrubs—On established shrub planting apply the food in the spring before the soil is worked. Where maximum results are desired it is advisable to feed the shrubs six weeks after the initial application. For newly planted shrubs it is advisable that the food be mixed with the soil at the time they are planted.

Trees—Usually trees are left to grow the best they can under the circumstances, but periodic feedings will promote a healthy growth and keep the trees in much better condition. Established trees need be fed but once a year in the following manner:

Group 1: Back marked black and white.

(a) Crown (not head nor neck) red, bordered black.

Throat red; male yellow-bellied Sapsucker (402).

Throat white; female Y-b. Sapsucker (402).

(a) Crown black or blackish.

Nape red; length 6 in: male Downy W. (394).

Nape red; length 9 in: male Hairy W. (393).

Nape not red; length 9 in: female Hairy W. (393).

Nape not red; length 5 in: female Downy W. (394).

Nape not red; back finely barred black and white; female American three-toed W. (401).

(a) Crown yellow.

Back finely barred black and white; male American three-toed W. (401).

Group 2: Back brown and black.

Black moustache mark at base of bill; male flicker (412).

No moustache mark; female flicker (412).

Group 3: Back entirely black.

(a) Head marked red.

Entire crown and moustache red; male Pileated W. (405).

Back of head only, red; female Pileated W. (405).

(a) Head not marked red.

Crown orange yellow, hind-head black; male Arctic three-toed W. (400).

Crown and hind-head black; Arctic 3-toed W. (400).

A "key" is necessarily the briefest statement of the specific differences, but there are a few other distinctions which will help the observer, and these are presented below:

The Downy woodpecker (394) smallest of our W's, and commonest. Outer tail feathers with several black bars or spots. Resident.

The Hairy W. (393). Almost counterpart of No. 394, but 1-2 times as large. Outer tail feathers pure white. Rarer than the last. R. Arctic Three-toed W. (400). The plain black back, and the barred sides of the breast and underparts are diagnostic. Winter V. American Three-toed W. (401). The black and white markings between the wings are characteristic and have earned this bird the name of "Ladder-backed W." Summer R.

Yellow-bellied W. or Sapsucker (402). "Two excellent field marks are the yellowish underparts and the white patch on the wing." S. R. Pileated W. (405). Its large size—17 inches—and red crest should distinguish it. In flight it shows white wing patch on black plumage. Owing to clearing of woodlands, and perhaps persecu-

## NEWSY NOTES

BY AGRICOLA

NOTES ON THE WOODPECKERS

Our woodpeckers belong to a family that has little need of description, since everybody is prepared to recognize the "Woodpecker," as it is locally termed, at a glance. It may not perhaps be generally known that we have seven species with us during the year, some being residents all the time, some are summer residents, and one is a winter visitor. In the case of the Pileated woodpecker, one of the handsomest of the group, all the information that can be gathered is, that it was formerly well known here.

The woodpecker is not amongst the shiest of birds, but it seems to be suspicious of too close or too prolonged a scrutiny, and will almost always dodge round to the other side of a tree trunk on which it is working, away from the spectator. In working over a tree, it hitches up the trunk vertically, its progression in that respect differing from the aimless wandering of its relative the nuthatch, or the spiral tracking of the creeper. In flight the woodpecker rises and falls in a sort of undulating motion, and this is very noticeable in the case of the Downy woodpecker.

As all know, these tireless birds search the trees, both living and dead, for wood borers, and for the concealed eggs and larvae of the insects. They are not less destructive of the numerous forms of insect life in the adult stages, consequently they ought to be protected by every means in our power. In the fall they change over to a diet of wild fruits and weed seeds. They readily respond to our efforts at "winter feeding."

Some of the woodpeckers look so much alike that they are difficult to differentiate, at least for the novice. The subjoined key to our species will therefore be helpful, and students of bird life will do well to preserve it. The figures in brackets are the birds' official numbers.

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Throat white; female Y-b. Sapsucker (402).

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## Have Your Seed Graded

The Seed Branch of the Dominion Department of Agriculture calls attention to the facilities which are available throughout Canada for the inspection and grading of seeds more particularly alfalfa, clover and grass seed.

In every district where these seeds are grown there is a Seed Branch inspector who inspects seed offered for sale for seedling purposes and furnishes information relating to cleaning and grading of seed, and under some circumstances performs grading himself.

Seed of course must be properly cleaned to remove the weed seeds and dirt before submitting it to the inspector for grading. In a large number of localities this could be done best perhaps at the local power cleaning plant designed for small seeds and which operates at a reasonable cost for the service performed. Where such is not available, however, the hand mill on the farm with equipped with suitable screens, should do reasonably well, provided the seed does not contain certain weed seeds that require special equipment for their removal.

Seed of the latter type should not be sold locally, but to a seedsmen who has the special equipment for cleaning to marketable quality, or for export.

ence that I could see.

This visitation of thrips must have been pretty general all over Canada, if one may judge by notices in the gardening press. Prof. A. G. Dustan, of the Dominion Entomological Branch, who has been working on this pest all the winter, has devised measures of control which have given promising results, according to the Canadian Horticulturist.

For the small grower, a bath, or dip, for the dormant corns is most convenient. If the corns are soaked in water held at a temperature of 120 degrees F., for 10 minutes, all the thrips—adults, nymphs and pupae—are killed. It has not been possible to test the effect on the eggs of the thrips, but in all likelihood they would experience the same fate as the other stages of the insect. The nuts may be left on the corns if preferred. The temperature of the bath must be held up for the entire period by pouring in additional hot water from time to time.

Another bath recommended by Prof. Dustan is composed of whale oil soap one pound, to four gallons of water. The corns are peeled, and soaked in the liquid for three hours at a temperature of 70 degrees F. "Whale oil soap can be purchased at most seed stores, and some hardware stores keep it."

Thrips on the growing plants were best controlled by a spray of Paris green two tablespoonfuls, brown sugar two pounds, and water three gallons. This was used weekly, and the plants washed off from time to time, to remove the sugar residue.

## The Garden

In thinking of the situation of the Perennial garden, it is difficult to make any rule as every home is situated differently. However, we must have sunlight for most of the day and good drainage is essential. Shelter from high winds is desirable, but you can always plant ledges or some kind of windbreak. A back ground of shrubs or trees brings out the beauty of your flowers, and a lattice fence or wall are also very good. These can be covered with vines or climbing roses. The sides or back of the lawn will do very well for flower borders and a width of from three feet to fifteen feet may be used, according to the humbler flowers that you have. The border must be dug very thoroughly and well mixed with old rotten cow manure. Sometime it is necessary to carry in rich soil from the vegetable garden or some such place. Besides the perennial plants that we have mentioned that are easily grown from seed, there are two or three perennials that must be propagated by roots or cuttings. Among the most common and reliable of these is German Iris, in all colors. A very hardy beautiful flower in June. This is a cheap and vigorous plant that multiplies very quickly. We all know the peony plants that come in shades of red and pinks and white. They also are very hardy and increase in beauty and size each year. Perennial Phlox is a wonderful flower for August and is also fragrant, with a number of these plants we soon have a splendid showing for several weeks.—C.

## The Song Of The Lazy Farmer

My neighbor says the way to win is put a great big garden in, if you've a lot of garden truck you ain't so badly out of luck when corn is low and doesn't pay, you're sure of dinner anyway. That fellow is a lucky cuss who raises his asparagus, you can't get bumped as very hard if you've a garden full of chard, you're sure that you won't miss your eats if you raise lots of spuds and beets. The people that go broke, alas, are those who grow no garden sass; with dinner tables heaping high with cabbages and salsify we needn't worry nor complain about the price of hogs or grain.

The trouble with a garden is it takes a lot of work, gee whiz, you toil all summer with the hoe, then like as not the bugs will go and eat the lettuce and the beans, they thrive on cucumbers and greens. And anyway, I'm not a cow to live all summer long on chow, some folks can fill up on green peas till they're so full they cannot sneeze, but me, I do not give a hoop for radishes or carrot soup. I'd sooner live on hay and grass than get along on garden sass, a rutabaga or a bean won't fatten up a man that's lean. When you are hungry, what's the use of fillin' up on turnip juice? I don't make a garden any more but eat on things from out the store, as long as I can run my face there's b no garden on this place!

## EGG LAYING CONTEST

Report of the Prince Edward Island Egg Laying Contest for the week ending April 16, 1935.

No.	Name and Address	Breed	1	2	3	4	5	6	7	8	9	10	Points
1	Exp. Station Ch'town	B.H.	46324	45825	45825	45825	45825	45825	45825	45825	45825	45825	42
2	Exp. Station Ch'town	B.H.	68555	68667	68667	68667	68667	68667	68667	68667	68667	68667	57
3	Exp. Station Ch'town	B.H.	47668	76887	76887	76887	76887	76887	76887	76887	76887	76887	59
4	Exp. Station Ch'town	B.H.	67075	55666	55666	55666	55666	55666	55666	55666	55666	55666	59
5	William Sanson	B.H.	36615	34233	34233	34233	34233	34233	34233	34233	34233	34233	57
6	Exp. Station Ch'town	B.H.	56376	65384	65384	65384	65384	65384	65384	65384	65384	65384	59
7	Exp. Station Ch'town	B.H.	67786	78684	78684	78684	78684	78684	78684	78684	78684	78684	59
8	The Roe Poultry Ranch	B.H.	5235	45684	45684	45684	45684	45684	45684	45684	45684	45684	57
9	Exp. Farm Fredericton	B.H.	76886	55685	55685	55685	55685	55685	55685	55685	55685	55685	57
10	Exp. Farm Fredericton	B.H.	38455	77677	77677	77677	77677	77677	77677	77677	77677	77677	57
11	S. R. Pendleton	B.H.	68434	47474	47474	47474	47474	47474	47474	47474	47474	47474	57
12	Exp. Station Ch'town	B.H.	68434	47474	47474	47474	47474	47474	47474	47474	47474	47474	57
13	William R. Brown	B.H.	56855	44554	44554	44554	44554	44554	44554	44554	44554	44554	54
14	John R. Poole	B.H.	73555	55467	55467	55467	55467	55467	55467	55467	55467	55467	47
15	Mr. J. P. Easton	B.H.	66767	76767	76767	76767	76767	76767	76767	76767	76767	76767	64
16	Mr. J. P. Easton	B.H.	55666	45766	45766	45766	45766	45766	45766	45766	45766	45766	55
17	Harold Laird	B.H.	55628	65432	65432	65432	65432	65432	65432	65432	65432	65432	42
18	John B. Poole	B.H.	44378	446	446	446	446	446	446	446	446	446	42

## SPREAD OF DODDER IS CAUSING ALARM

Clover Dodder, or Lone Vine as it is sometimes called, is legislated against more than any other noxious farm weed. Mr. George H. Clark, Dominion Seed Commissioner, calls attention to the fact that it has increased to an alarming extent in Southwestern Ontario during the last few years and is apt to become a cause for real anxiety in some districts of the Lake Erie counties of Ontario next autumn.

Export shipments of reed clover seed are refused unless absolutely free from the seeds of this parasitic weed. It would seem to be incumbent on Canadian exporters of clover seeds to know the laws of other countries in this matter. It is unfortunate that the farmers of Southwestern Ontario do not fully understand that the introduction of this pest on their farms may establish for them an unusually serious problem—a dodder infested farm. Probably none of them have ever stood by a field of ten or twenty acres of clover or alfalfa lying completely destroyed and blackened as a result of this parasite, the tender vines of which spread rapidly from plant to plant enmeshing and feeding on the clover stalks.

Clover Dodder belong to a warmer climate than that of Canada. Sharp September frosts prevent the maturing of dodder seed the first year following a nurse crop, but we have had three successive years with little or no frost injury until late in October, with the result that clover dodder has become well established in some localities and there has been considerable distribution of dodder infested clover seed from farm to farm.

## IN THE STUD

**Kalmuck, 2.15 1/2**

Standard and Registered

Sired by Peter the Great, 2.07 1/4; Dam, Ester Bella, 2.08 1/4. By Monbells Second Dam Expressive, (3) 2.12. Dam of Atlantic Express, 2.07 1/4, one of today's leading sires. Sire of Nedda, 1.59 1/4, a world's champion—By Electioneer, son of Hamiltonian 10.

Kalmuck is already a proven sire. His only colts over two years old has won race record of 2.14.


Kalmuck was wonderful race horse. Has been second in race in 2.04. Kalmuck will stand for service at time of service. Terms \$5 mare proves with foal. Mares at owner's risk.

WILLARD KELLY.

## TURNIPS

We will be buying Turnips and Certified Seed Cobble Potatoes at Hogan's Wharf until further notice. Accommodation for boatloads.

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Charlottetown  
Cor. Queen and Water Streets  
Phone 938



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The success, following the use of this popular "Imperial" product during past seasons, has clearly proven its merits to our experienced ranchers, who are planning on feeding liberally this year.

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The booklet is made up of illustrations—in warm brown tones—of handsome buildings, both exterior and interior views, in which "Pinus Strobus" plays the major part. Last but not least attractive, are two pages of "garden furniture." This excellent brochure may be had, free, on application at the above address.

**THE GLADIOLUS THRIPS**

I had a woeful experience last summer. In the spring I purchased some gladiolus bulbs and expected to make a great show with them later on. I gave them a place of honor in the garden, and tended them fairly well, but as the flower spikes formed, there was something seen to be amiss. Examination showed that a minute insect was injuring the "skin" of both leaves and buds, and the few flowers which developed were miserable, deformed objects. The plants were sprayed several times with soap emulsion, but this made no differ-

South Shore approach to the Harbour Bridge, Montreal. Kennedy Construction Company, Contractors. J. E. Poirand, Minister of Highways. J. L. Boulanger, Deputy Minister of Highways. Alex. Fraser, Chief Engineer, Dept. of Highways.

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