

FOR FARMERS, STOCK BREEDERS AND GARDENERS

What Better Breeding Means

(C. E. Mackenzie)

Pages have been written and printed on better breeding and the lines of dairy cattle in Canada. Much of which has been of advantage to our dairymen in their endeavor to promote the industry, but the fact still remains that we've far too many cows being milked that are a detriment rather than an advantage to this most important agricultural industry.

For instance I will venture to say that clear of the vicinity of Charlottetown and a few other good breeding centres we have school district after district that are not using a pure bred dairy sire. We have something about five hundred school districts on Prince Edward Island and in each school district we have room for at least two good dairy sires; this would mean that if every district had its quota we would have about one thousand pure bred animals in service which if each had a service of say, thirty cows and supposing one half the offspring were females, this would increase the female population of each district thirty each year and counting five hundred districts it would mean about fifteen thousand heifers with at least one pure bred dairy cross and in the course of say six years this should mean at least three dairy crosses which if each heifer only milked three and one half pounds per day more than their mothers would mean in a three hundred day period a gain of one thousand pounds per cow, which if multiplied by fifteen thousand would mean an increased revenue even at present prices of about ninety thousand dollars, an object worth looking forward to and that practically at no increased overhead, which by the way, is the greatest determining factor of any industry. Now, I have only put increase at three and one half pounds milk per day and I am sure that the increase in many cases would be over double that amount. As it is inherent in the human race that when an animal or machine produces a larger profit than heretofore that we take more interest in our business and as a natural result we will feed better and take better care of those machines as they increase in value.

Now, for instance, what would this increased revenue mean to a province like Prince Edward Island when the purchasing power of the producer is increased by almost one hundred thousand dollars, I am convinced that an increase of revenue such as this should not only interest the farmers themselves but every citizen of our province, as the larger the revenue, the greater will be the trade throughout the land.

Remember it does not only mean that we will have that much more butter and cheese for sale but also we will have more hogs, poultry and eggs, as the skim milk and whey from the above revenue means a greater amount of home grown feeds to be used on our farms. As some one has said that in selling butter and cheese we sell about ninety per cent sunshine, then if these by-products are fed at home it not only means greater yearly revenue but it also means that the farmer is building up the soil of his farm which, as the years go means another source of wealth.

Then breeding improvement with improved feeding and care are the centre round which we may in future build far greater success.

Now how are we to go about getting this increased revenue and creating a greater interest in this our greatest industry?

There are many plans, all feasible that could be adopted but many of them at a larger initial cost than I am led to believe that we have a sufficient number of breeders of pure bred stock in this

province that have the advancement of the industry at heart that can be depended upon with the co-operation of our Department of Agriculture to ensure the success of a plan which in three years would place at least two good dairy sires in every school district in the province.

In the four dairy breeds bred here, possibly the Ayrshires and Holsteins have the larger number of breeders, with Jersey and Guernseys following along closely. And if the breeders of each breed would agree to either exchange a well grown male calf for a full grown grade or scrub male that could be disposed of for beef, or sell for a nominal price, a male to every district desiring to improve

RURAL FARM EXPENSES

Few facts are available for reference on the cost of living in rural farm homes in Canada says the Economic Annalist, published by the Dominion Department of Agriculture. However, in a survey of 157 farms in the Red River Valley of Manitoba in 1931 by the Dominion Economics Branch, data on family living were obtained from 129 of the records. Cash expenditures per family averaged \$688.32, while farm furnished items amounted to \$1,088.74 for the average cost of living during the year.

Cash expenditures were 60.47 per cent of the total, while farm furnished items averaged 39.53 per cent. Fully 49.12 per cent of the total goods and services was spent on food, the average expense for food being \$334.84. Over half this amount was supplied from the farm in butter, eggs, milk, garden produce and meats. Clothing accounted for 9.58 per cent of the total, or an average of \$104.32 per family. The average farm family spent \$45.34 for health purposes; \$37.70 on education; \$44.29 on amusement, \$20.01 on churches and charity, and \$24.92 as half the amount spent on operating the automobile charged to family living.

BLACKFLIES IN ONTARIO

An unusual abundance of blackflies has been noted in Ontario, particularly in the forested sections. A severe outbreak occurred at Carleton Place, Ont., in late May and June. The outbreak developed from the waterfalls and rapids of the Mississippi river at various points from the centre of the town to Appleton, Ont., three or four miles downstream. The blackfly infestation on in this locality, says the Dominion Entomological Branch, is an annual occurrence, but this year the infestation was reported to be considerably heavier than usual. The situation is a serious one from the point of view of the local inhabitants whose comfort, and possibly health, are adversely affected by these insects.

CROPS FOR ROLLING LANDS

Permanent pastures are extensively grown on rolling lands. Canada blue grass, red top, Kentucky blue grass and white clover are useful for this purpose. The first mentioned grass is of particular value where the soil tends to dry out in summer. The common mixture of red clover, alsike and timothy may be sown for hay and the timothy left down for a number of years. Alfalfa is an excellent crop for hill-sides and is to be desired over other hay crops where it will grow successfully. In order to receive a good stand of this permanent hay crop, liming may be necessary on some soils.

Oats, rye, wheat, and corn are crops frequently grown with success on rolling lands, but these crops are not as effective in controlling erosion as hay and pasture crops. If satisfactory crop yields are to be secured, says the bulletin on crop rotations and soil management issued by the Dominion Department of Agriculture, farm manure must be applied at seasons when it can be ploughed under before any loss of fertility takes place. Fall and winter applications of manure (farm or commercial fertilizer) are not desirable except on level land because of the great loss of fertility which is liable to occur from spring run-off.

their breeding activities our department taking the cost of transportation and a general oversight of animals thus placed, and the exchange of some every two years and where districts are progressive enough, assist in the purchase of qualified milks of the breed required. I feel that a great deal could be accomplished in a short period that would bring the dairy industry revenue up to an amount over double what it is today.

for NEURITIS

One thing that helps it to warm a dial, pour in Minard's. Then rub the liniment gently in.

Pain eases off!

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"KING OF PAIN"

LINIMENT

POTATOES

Can handle a few hundred bags this week at Hogan's wharf.

J. Lester Douglas

1794-7-14-21

Protecting The Onion

During the month of June it is not uncommon for the onion maggot to destroy 75 to 95 per cent of them. Experimental work by the Dominion Entomological Branch has shown that this pest can best be controlled in Eastern Canada by means of an oil emulsion spray which is applied to the young plants and surrounding soil four times during the early part of the season. Any medium lubricating oil of good grade may be used at the rate of one gallon to thirty-nine gallons of water if the water is soft, or to the same quantity of Bordeaux mixture if the water is hard, depending upon the available water supply.

An oil spray mixture can be made as follows: Make a gallon of Bordeaux mixture by dissolving 2 ounces of finely powdered bluestone (copper sulphate) in a gallon of water. When the crystals have disappeared stir in 2 ounces of hydrated lime and agitate the mixture thoroughly. Pour the resulting pale blue liquid into a pail or tub and add 1 gallon of lubricating oil. By means of a bucket pump or knapsack sprayer, pump the liquid back into the container for about five minutes when a pale green emulsion of the oil and Bordeaux mixture will be produced. Before pouring this into the spray tank it should be tested for free oil. Place a small amount in a can of water and if, after stirring, no oil droplets float out on the surface, the emulsification may be taken as complete. Should free oil be noticed, however, further agitation will be necessary and this should be continued until no free oil becomes apparent.

When the 2 gallons of emulsion are ready they should be mixed with 38 gallons of soft water, and sprayed on the plants at once. Where only hard water is available the emulsion should be added to 38 gallons of Bordeaux mixture (see below), since it has been found that the emulsion frequently breaks down in hard water resulting in oil being liberated, which is injurious to the plants. The emulsion should be used in all cases as soon as prepared in view of the fact that the oil has a tendency to separate out when allowed to stand for any length of time.

If a power sprayer is available, fitted with the regular type of agitator, the oil and Bordeaux can be emulsified much more simply right in the tank. In this case, however, it will be necessary to use Bordeaux mixture as the spraying medium instead of water. The method is as follows: While the tank is being filled with water pour in the required amount of finely powdered bluestone and allow the agitator to run until this is completely dissolved. The hydrated lime, previously mixed with water in a pail, should now be added and the bluestone and lime agitated until a pale blue liquid results. Then pour the oil directly into the tank and thoroughly mix for about five minutes. This can be done by allowing the engine to run while the sprayer is being hauled from the source of water to the field. For 40 gallons of spray use 4 pounds of copper sulphate, 4 pounds of lime and 1 gallon of oil. For larger tanks increase these amounts proportionately.

There are acres and acres of woodlands, containing both native and foreign trees, which I shall not attempt to describe; there is, however, a section near the Old Deer Park, which is a wonderful sight in late May, when the fragrant English bluebell or wild hyacinth (*Scilla nutans*) makes the lawn under the trees as blue as the sky above them. Free as the visitor is to wander whither he pleases, at that particular time and place he is kept to a fenced path so as not to mar the beauty of this scene.

There are a number of "Museums" in the ground of which I must confess a lamentable ignorance, but then as my time at Kew was also too limited, I was most of the time in the "houses"—short for glass-houses or greenhouses. The house most in favor with the general public is the Conservatory, which is not far from the main entrance. The arrangement of this house takes constant care and planning for no matter what month of the year it is the display of bloom must be kept up. This is done by drafting in plants from other houses and removing them after flowering. Incidentally it must be mentioned that much of the work at Kew is necessarily light work, and in that case it is done by men, who were disabled in the World War. Close by is the "Succulent House" full of the oddest vegetation one could imagine, and from all over the world. Thick fleshy plants, grotesque in form, with an excessive armature of spines and prickles, they look most unreal. Some of the columnar cacti are as big as the biggest gate post you ever saw! There are several other houses near the Succulent house, but to be brief I must mention the "Sherman Hoyt Cactus House." This is a new feature, the house, picture and plants having been presented to Kew by an American lady in 1929. The picture represents a part of the Mohave Desert, California, and acts as a background; and the scenery is continued out to the spectator by similarly colored blocks of Old Red Sandstone, on which the cacti and other plants typical of the desert region grow. This makes a striking photograph.

Climber—But what if the rope breaks?
Guide—Now don't worry about that. I've plenty more at home.

Fox Feed Price List

Beef Cheeks	Per lb. 4c
Beef Hearts	Per lb. 5c
Beef Tripe	Per lb. 3c
Beef Trimmings	Per lb. 6c
Beef Liver	Per lb. 8c
Boneless Beef	Per lb. 6c
Horse Meat	Per lb. 5c
Weasand Meat	Per lb. 5c
Calf Hearts	Per lb. 5c
Lamb Cheeks	Per lb. 3c
Lamb Tripe	Per lb. 2c
Lamb Flanks	Per lb. 2c
Hog Livers	Per lb. 3c
Hog Flocks	Per lb. 2c
Cash Price	1/2c per lb. less.

Island Cold Storage

1794-7-13-11.

NEWSY NOTES

BY AGRICOLA

"KEW"

The little village of Kew is in Surrey, England, within easy distance of London; to be concise, just six miles from Hyde Park corner. The attraction at Kew is the Royal Botanic Garden which contains the most notable collection of plants in the world. It was a wonderful place when I used to visit it half a century ago, and the Curator tells me many features have been added which make it still more wonderful. Tourists from P. E. I. to the Old Country do not seem to visit Kew, at least one never reads of their doing so; but that it is an attractive spot is evidenced by the fact that upwards of 900 people enter the main entrance every day in the year—and there are four other public entrances, which together admit as many more.

Before going on to describe the Garden in some detail, it is worth recalling that the late Joseph Chamberlain, then Colonial Secretary, said in the House of Commons on August 2, 1898: "I do not think it too much to say, that at the present time there are several of our important Colonies which owe whatever prosperity they possess to the knowledge and experience of, and the assistance given by, the authorities at Kew Gardens." In fact one of the chief duties laid upon the Director when the Gardens were first presented to the nation by Queen Victoria (in 1841) was the introduction of new and useful plants to the British dependencies, and the fostering of new industries connected with them. Of course, as the Empire developed, each member has constructed its own "botanical garden" to suit its own needs, but the services which "Kew" rendered to the young nations should never be forgotten.

The Gardens comprise 288 acres of fine alluvial land bordered on the one side by the river Thames. Near the main entrance, (a beautiful structure with magnificent wrought iron gates) one can get a colored descriptive map of the Gardens at an information kiosk, for a nominal sum, and with this in hand, finding one's way about is an easy matter.

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The Orchid House contains about 1,800 species, and although a considerable number grow with their roots in the ground—as do our Island species, the great majority of them live in nature as "epiphytes" on trees. There is a great diversity of form and coloring among the Orchids, and for scientific purposes all kinds are grown, insignificant as well as attractive species; hence the Orchid House is not nearly as gay as the Conservatory where color is the first consideration.

One of my favorite haunts was the "Victoria Regia House." The floor of this house was a large rectangular tank with a "sidewalk" all round it; and floating in the water were specimens of the giant water lily of the Amazon, named after Queen Victoria. I was told that the plant had to be treated as an annual as it would not survive the English winter; not as you may surmise from cold, but from want of tropical sunshine. So the seed is sown in a pot in February and the young plants transferred to the tank six weeks later; and, believe it or not, by midsummer the leaves are six or seven feet across, with turned up edges 4 to 6 inches deep, like tea trays! The flowers are about one foot across, fragrant and white, turning purple-pink as they fade. They last but 24 hours. The Victoria Regia is one of the wonders of the vegetable world.

Next is the "Stove House." Of course nearly all the houses at Kew have stoves, but to the British gardener a stove house implies a high temperature and tropical plants. Stove houses were once very popular with wealthy people, but in these difficult days are all but relinquished. Alongside the Stove House is the Nepenthes House, full of pitcher plants—remarkable plants to the midrib of whose leaves is prolonged and dilated into a "pitcher" with a hinged lid. Next to these the Sensitive Plants whose leaves shrink and droop at a touch, and the "Telegraph Plant" (*Desmodium gyrans*) with trifoliate leaves like a clover, only the leaflets are pointed. The central leaflet vibrates incessantly up and down, reminding one of the old whetstone needle telegraph.

Before we pass on to the Palm House we must admire the Rock Garden. This was originally modelled on a narrow rocky pass in the Pyrenees, but the idea was not consistently carried out. The plants used are mainly Alpines of the North Temperate Zone from the Alps to Japan. Alpines are, for the most part, characterized by a rosette or cushion like habit of growth with small crowded leaves, and relatively large and brilliant flowers. The great popularity of rock gardening at the present day is owing to the fact that in no other branch of horticulture can so many beautiful and distinctive plants be grown on so small an area.

The Palm House is a fine structure about 400 feet long. It is a regular "Crystal Palace", with arched glass roof and an elevated dome in the central portion. This large building is divided into compartments with different temperatures for different subjects, and it is the dome which is the palm house proper. Here we find a tropical vegetation of cocoanut palm, Ivorynut palm, Wine palms, Oil palms, and Caradivias the latter being the source of the "Panama" hats. Bananas, too, are here, often in fruit. One of the compartments is the Water Lily House, where tropical waterlilies, with gorgeous blue, red, or white flowers, float in a central circular tank; amongst them is to be seen the Sacred Bean or Lotus of Hindostan and the Papyrus plant of Egypt. To the east of the palm house is a small ornamental lake, named (rather feebly) in the map as "The Pond"; and it is a sight to be remembered when the sun's rays reflect the huge glasshouse in the placid water. Time is running on and we have just sufficient of it to enable us to visit the Temperate House. We must leave the classic "Temples" the Pagoda, Queen's Cottage, Kew Palace, and the Japanese Gateway (though each has a history) for another visit. The two curious Sundials, the Lake, the Dell, and the Aquatic Garden, too, we must forego. But not the Refreshment Pavilion!

The range of glasshouses called the Temperate House, or winter Garden, is half as long again as the Palm House. It is in sections, too, and these contain plants from all over the world, which are just too tender for the open air at Kew. In the central house there is a gallery in the roof reached by a spiral

staircase, whence one may look down into a collection of plants and trees unequalled in any other plant house in the world. Here are to be seen Date Palms, and Ohilean Honey Palms, and many trees from Australia, Norfolk Island and New Caledonia; the famous Dragon tree of Tenerife, now dead, lives again in the Temperate House at Kew, for a branch was brought across and "struck" when it was seen that the tree was dying. That tree, *Dracaena Draco*, was thought to be co-eval with Creation!

And now our day at Kew is ended; we pass out of the Lion Gate into Kew Road. Halfway up the Road, to our left, we notice the huge flagstaff of Douglas Fir, from British Columbia. It weighs 18 tons and is 214 feet high. The tree that produced it was cut in 1914, and was about 290 feet high. Some of my readers may remember it going across in Wartime. It was taken from Vancouver on the deck of a ship, dropped into the Thames and towed to Kew where it was erected in Oct., 1919. A short walk of a quarter of a mile brings us to Kew Gardens Station, then—"Home, James!"

Spinning and Weaving

Send me in your wool to be spun into Yarn and weave into Blankets. The charges are: single yarn 23 cents doubled 26 cents per pound. Blankets \$2.00, and if unlaunders \$1.85; it takes five lbs. of wool per Blanket. Wool must be well washed and all dirt and burrs picked out. The size of single yarn is medium, and doubled yarn fine, medium, and coarse. Put shipper's name on all parcels and owner's name, address and instructions inside. Send by mail or freight. Freight will be paid on 100 lb. lots.

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ROMAN BRITAIN, A. D. 287-296

We left Carausius in mortal peril, with the Emperor's messengers on the way with orders to put him to death. His spies quickly informed him of Maximian's intentions, and he was sagacious enough to be aware of his one chance of safety. He was popular among his own soldiery, and the great wealth he had amassed gave him the means of hiring mercenaries; and making use of these advantages, he allied himself with the Franks and other German tribes, seized the great naval station at Gessoriacum (Boulogne) and proclaimed himself one of the Emperors of Rome. Revolts in other parts of the Empire encouraged him in his design. (A. D. 287).

Carausius maintained his usurped sovereignty during a period of seven years. There is no account of the manner in which he governed Britain, but that he was a man of extraordinary talent is evident from the facts that he set the power of Rome at defiance, that he protected his subjects from the Saxons, and that he compelled the northern barbarians to keep to their woods and marshes.

One of the noteworthy characteristics of the short reign of Carausius is the number and variety of his coinage: over three hundred different types are known, and most refer to historical events. One of these coins, for instance, coined after the seizure of Gessoriacum, is inscribed *Expectate Veni*, and the figure represents the genius of Britain, with a trident in her hand, welcoming the new Emperor. Another, (now in the British Museum) bears the Emperor's head with a front face, instead of the usual profile. This, and the superior execution, lead to the supposition that it was struck as a correct portrait of this remarkable man.

In 292 A. D. the two Roman Emperors Maximian and Diocletian, further strengthened their government by the appointment of two "Caesars," Constantius and Galerius; and Constantius, to whose lot fell the western part of the Empire, immediately prepared to reduce the island chieftain. He collected a very powerful army, made a rapid march to Gessoriacum, and laid siege to the great naval station. As the port could only be entered at full tide Constantius took advantage of the ebb to block it by an embankment of piles and stones. Before he could carry this out, Carausius took to his ships, broke through, and sailed for Britain. Gessoriacum soon surrendered, but of what use was the port without the ships?

Four years passed away in the construction of a new fleet, in the course of which time Carausius himself had ceased to exist. Allectus, an officer whom Carausius had placed at the head of his fleet, lured by ambition, basely and treacherously murdered his master.

GREEN FEED IMPORTANT

Growing pigs made excellent use of green feed. While pasture for pigs is recommended, expert producers of high-quality market hogs prefer feeding green feed in racks in the pen daily. The bad effect of sunburn and weather are thus avoided. Clover, alfalfa, oats, peas and rape are suitable for green feed. It must be fed freshly out and regularly. Grass and many varieties of weeds, such as lamb's quarter, pig weed, etc., are useful, as also is garden waste. The practice of using green feed is too often neglected. It is not that a pig consumes any great quantity of green. The desirable effects of getting some suitable fresh vegetable matter regularly each day is responsible for the healthy, thrifty condition induced.

Winter fed market pigs and breeding stock relish a little fibrous matter to chew and they will require it regularly. They will eat straw if nothing better is available. Give them second cut clover or alfalfa or any well cured grass or cereal crop that has been cut green. The desirable effects of feeding a few mangel's daily are too well known to call for further comment. The thing is to see that all pigs, except the very young, get some form of vegetable matter regularly.

Pigs which do not have access to earth should have a box of it in their pens. It is as cheap as it is desirable, and will be consumed sparingly but regularly. Laying up a supply of sods in the fall provides for a good mineral supplement in the case of winter fed pigs.

BLACK-SNOUDED ROSE BEETLE

(A. D. 293). He immediately seized the imperial authority, and without the abilities of Carausius attempted to follow in his course. At length, in the year 296, Constantine had completed his vast preparations, and he is said to have been the first to set sail. The principal force under the praefect Aselepiodotus followed, and under cover of a thick fog, eluded the fleet of Allectus which lay off the Isle of Wight. When the prefect landed on the British coast, he set fire to his ships, that his troops might find their only safety in victory.

MOTHS IN NEW HOUSES

There are drawbacks in new houses, as for instance, the heavy infestation of new dwellings in a residential section of Montreal by the Webbing Clothes Moth. The larvae were said to be feeding on an insulating medium in the walls consisting essentially of horsehair between layers of paper, and the emerging moths were appearing in rooms in great numbers.—Dominion Entomological Branch.

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