FOR FARMERS, STOCK BREEDERS and GARDENERS

- NEWSY NOTES -

By AGRICOLA

ANCIENT CARTHAGE

The Roman Empire arose on the ruins of two antecedent civilizations; the Carthaginian in Africa, and the Grecian in Europe. The Carthaginian was Semitic in origin, and it destruction relieved Europe from the dominance of a Semitic race, and for all time bound up its destiny to the conquering Aryans. We do not know much about Carthage save from Roman source, but the accounts of the Roman historians should be received with great caution, as being for the most part, propaganda of an extremely biased kind.

We do know, however, that the city of Carthage —the "New City," for that is its meaning —was founded by Phoenician colonists from the Syrian coast, about the year 850 B. C. They had fixed upon a situation not far from where the modern Tunis stands; and the city grew apace, for its position provenimently suitable as a commercial centre. From this small beginning the Canaanites (as they called themselves) extended their sway on the one hand to the Straits of Gibraltar, and to the borders of Cyrene (Tripoli) on the other. By the year 410 B. C., Carthage had attained the peak of her prosperity and power; she held Sardinia, the Baleastic Island, Malta, and a considerable part of southern Spain. The city had also planted colonies in Gaul; while at Abdera (in Thracia), in Crete and Cyprus, and at Tarsus, the Phoenicians of Syria had also established flourishing settlements. Carthage was thus in a fair way to making the Mediterranean "a Carthaginian lake." Her vessels traded to all parts of the known world, and she drew an immense revenue from the grain exported from the fields of Emporia lying to the south-east of the city.

Nevertheless Carthage had a weakness that lay in the diversity of her populations. Her African subjects consisted of three classes. The first in point of status were the Libyo-Phoenicians, the product of inter-marriages between the native Libyans and the first colonists: these cultivated the fields of the grain regions, but were looked down upon by the Carthaginians of pure blood. The Libyans, the second of the populations, though completely subdued, were of entirely different race, and were scarcely acquainted with the language of their new masters. They for the most part, were drafted into the Carthaginian army, but the hard treatment they received led them to join in revolts against their conquerors. In the hinterlands were the Nomads, who yielded a loose allegiance to Carthage, and supplied her with mercenary troops, mostly cavalry. But their fidelity could not be depended on and it was the assistance that they gave to Rome that finally led to the subjugations of the Carthaginians.

The foreign conquests of Carthage were solely in the interests of her commerce. The family of Barca, which founded the military power of the city, came to the front about 550 B. C., in the person of one Mago. The names Hannibal, Hamilcar, and Gisco, descendants of Mago, repeat themselves for many generations. "To the period of about 500 B. C.," says an old historian, "belong the expeditions of Hanno and Himilco (grandsons of Mago)— the one to found colonies on the west coast of Africa, which, would was probably explored as far as the mouths of the Senegal and Gambia, the other to obtain a knowledge of the Atlantic, which resulted in the discovery of Britain."

Carthage had long contemplated the conquest of Sicily and in the year 480 B. C. she interfered in a civil war in that island with disastrous results. The Carthaginians sent an army of 300,000 native levies, in 3,000 ships, says Herodotus; but they were defeated by the Sicilians with great loss at the battle of Himera, and their leader Hamilcar was killed. This battle, though we hear little of it, was one of the most important in ancient history; together with the defeat of the Persians at Salamis, which took place about the same time, "it decided the question whether Semitic or Aryan nations should hold the empire of the West."

For fully seventy years after the battle of Himera, Carthage made no move towards Sicily, but about 410 B. C., Hannibal, the son of Gisco, stormed Selinus, and revenged his grandfather's death at Himera. In 406 Hannibal and Himilco attacked Agrigentum the capital city of Sicily, and reduced it to a mass of ruins. By 398 B.C., the whole of Sicily had fallen before the Punic (Phonecian) arms; all but the city of Syracus, which was now besieged by Himilco. A pestilence broke out and made the Carthaginian defeat easy; 150,000 Punic corpses lay unburied on Sicilian soil, and Himilco knowing the character of his countrymen, starved himself to death rather than face their anger. The Grecians who likewise looked to include Sicily in their possessions, made war against Carthage, and inflicted some crushing defeats; but Carthage and Rome leagued themselves against the Greeks and in 276 B. C., the King of the Grecian Epirus withdrew his forces from Sicily, leaving the allies in possession of the island.

Peace between the ill-assorted allies did not long endure. The Carthaginians sought to limit the trading of the Romans by means of treaties and their ambassadors insolently told the Romans that they could not even wash their hands in the sea without the permission of Carthage. The first Punic War in which the two nations contended for the possession of Sicily, began in 264 B. C., and lasted for twenty-three years. The Romans won victories in 260 and 256 B. C., but sustained a defeat in 255 that taught them caution. This war was ended "by the brilliant success of Catulus in 242 B. C., and Sicily was lost to the Carthaginians." The Romans were a practical people, careful to borrow from their enmies whatever might increase their own efficiency, as Montesquieu says; whereas the Carthaginians, quite in modern spirit dissipated their energies in political jealousies, and cared for little but the profit gained by trade.

Many thousands of mercenary troops now returned from Sicily and their rebellion, by which Carthage was to endure a civil war of three and a half years, began in 241 B. C. We owe the best account of this critical period to the genius of Gustave Flaubert, who makes the combatants live again in the pages of his "Salammbo." There is a romance, of the torrid sort that Celtic genius approves, mixed up with the history but I cannot find that Hamilcar Barca had a daughter named Salammbo, whom therefore we must regard as fictitious. The other characters have historical warrant, and their chief attribute seems to be an appalling disregard of the value of human life. Hamilcar put down the rebellion with some difficulty, but a similar outbreak in Sardinia was more successful; "700 Cathaginians were barbarously murdered, and possession of the island passed to the Romans."

In 218 B. C. Hannibal, son of Hamilcar, last and greatest of the name, carried his arms into Italy in the Second Punic War. He was badly supported from Carthage, while the Romans and their allies, acted in patriotic unity; and the defeat and death of his brother Hasdrubal who was hastening to his aid, put an end to Hannibal's hopes of victory. In 202 B. C. Hannibal was recalled to Carthage which was threatened by the armies of Scipio. The victory of Zama in 202 gave the city into the hands of Scipio and ended the war. Rome no longer feared Carthage as a rival but permitted her to exist as a commercial community.

Hannibal governed the city for the next six years, instituted a democratic form of government instead of aristocratic rule, and "paid with surprising facility the enormous indemnity demanded by Rome." Unhappyily he began to plot against Rome with Antiochus of Syria, and was obliged to flee from Carthage to the court of Prusias, King of Bithynia. That monarch planned to deliver his guest up to the Romans, but Hannibal took poison and died.

For the next thirty years Carthage was weakened by internal dissensions. There was a Roman party, a democratic party, and a party led by Masinissa, probably aristocratic. Still, Carthaginian commerce was very considerable, and the Romans were irritated by the prosperity of their old antagonist. They manoeuvred the Carthaginians into the third Punic war (149—146 B. C.) where they displayed a bravery that might have given them the victory at an earlier period. It was too late, the city was taken, the inhabitants butchered, and the torch applied. Carthage burned for seventeen days, till its site was a heap of ashes; then the victors passed the plough over it, and sowed it with salt!

Some writers have likened England to Carthage, on account of her commerce and her conquests, but the likeness does not hold good in her treatment of subject races. The Carthaginians enslaved, and did not enlighten. But there is a parallelism in that England is confronted by a rival who forced on one war and is now threatening another.

ARE SOY BEANS NEGLECTED?

There is an article headed "Is Canada neglecting the Soy Bean?" in the September number of The Farmer's Magazine. It answers its own query by comparing the 8600 acres of soybeans grown in Ontario with the 3,000,000 acres grown in the United States. Furthermore, Canada imported soya products valued at nearly $700,000 in 1937, and is likely to increase its imports of these valuable products.

My soy beans in the garden are ripening, and the leaves are taking on the golden sheen which denotes that harvest time is drawing near. The leaves fall early and by the end of the month the beans will be under bare poles, as the ancient mariners used to say. In previous years I have pulled the stems up bodily and made them into sheaves. They are stooked for a few days and then stored till threshing. In order to get an early variety, for the last six years I have handpicked the pods that ripened first, and used them for seed; and now this selection is beginning to tell. I shall be glad to hear how my readers who are growing soybeans, have succeeded with them. It is said "wherever you can grow corn you can grow soybeans."

The aforesaid article points out that the soybean is divisible into 20 per cent oil and 80 per cent meal. Another analysis gives, besides the oil, protein 35 per cent, carbohydrates 26 per cent, and the remaining 19 per cent mineral ash and water. The oil is extracted either by hydraulic pressure or by employing gasoline as a solvent. A third method is gaining popularity as the "expeller method." The flaked beans are dry-heated to 150 degrees F., and are fed into an "expeller" that works like a meat grinder. 'A powerful screw or worm . . . operating in a perforated cylinder forces the material past a cone or choke, the oil as expelled passing through the perforations in the cylinder." The uses of the oil and meal are very numerous, and the reader will do well to secure the current number of the Magazine and study them for himself.

THE RAILWAY WORM

One lives and learns. The "Railway worm" which from the description of its ravages, I took to be the larva of the Codling Moth, turns out to be something new— to me at least. My good friend, Mr. Ludlow Jenkins, who visited me recently, brought a few apples infested by this insect to demonstrate its appearance and work. The "worm" is very small and tunnels through the flesh of the apple in every direction, so that none of it can be used. The surface of the apple develops in an irregular, fashion with characteristic "hills and hollows," interspersed with minute punctures. I gather that this pest is not general in the Island as yet, but where an orchard is infested the effects are disastrous. I was further told that the earlier varieties of apple, such as Yellow Transparent, are apparently immune, and that the remedy is a poison-spray in July. It is getting so that spraying is indispensible for all most everything.

The Canadian and American entomologists issued a list of "approved common names" of insects in 1930, but no "Railway Worm" is among them. The briefest of notes states that an insect termed the "Apple Fruit Miner" had turned its attention to the plums in British Columbia that year.

PRAGUE, LONGFELLOW, ETC.,

So now Prague is to be pronounced Prahg. What are we going to do about Longfellow's parable beginning:—

"I have read, in some old marvellous tale,
Some legend strange and vague,
That a midnight host of spectres pale
Belsaguered the walls of Prague."

The list of places in the back of the Candaian Geography says the word is pronounced with the long "a," so that it would rhyme with plague: so does a dictinary of "modern Geographical Names." Well, well, 'tis a new world, my masters!

Longfellow had a great vogue in England years ago, and his poems were included in most of the School Readers. Just about the time when the evangelists Sankey and Moody were at the height of their fame, an attempt was made to include "The Skeleton in Armour" in the school repertory. Objection was taken to a certain part as being unfit for schools, but a newspaper man connected with the Newcastle press, came to the rescue. He quoted Longfellows lines:—

"I wooed the blue-eyed maid,
Yielding yet half afraid,
And in the forest shade
Our vows we plighted.
Under its loosened vest
Fluttered her little breast,
Like birds within their nest
By the hawk frighted.

And then gave a new version, for nurseries and the like, as fellows:—

I wooed the blue-eyed maid,
But she was sore afraid,
For in the forest shade
I loomed up lanky.
Oh it was sweet to see
Us two beneath a tree,
Singing the hymns— ah, me!—
Of Moody and of Sanky.

Strange to say, this lyric gem found as little favor with the school authorities, as the original did with the public!

COLOR IN THE KITCHEN

Give the kitchen a touch of color too—especially if the curtains are at all faded and shrunken. You can buy the lovesliest oilsilk by the yard for curtain-making. You can get it either plain or paterned — then it's polka-dotted,chequered or besprigged with tiny flowers. An occasional sponging is all that it ever asks of you.

To be really smart, besides curtaining your windows, curtain off the under part of your sink—thus hiding the humble pail and washing-up bowl from the eyes of the world!

Very fresh bread is apt to slice raggedly. Try heating the blade of your breadknife until it is very hot before slicing the loaf.

DAIRY TOPICS

Prepared by Provincial Department of Agriculture in Co-operation With the Directors of Dairymen's Association.

In many parts of Ontario feeds are apparently low in mineral constituents and it is impossible for the cow to secure sufficient minerals from the rations supplied to meet the demands of the body. This condition is first indicated by signs of depraved appetite; cows chewing bones, sticks, leather etc. If a shortage of mineral matter continues the animal will later become stiff, thin and emaciated, often lack appetite and become drawn up in appearance. The claws or toes will grow abnormally long and production will be severely interfered with. Calcium and Phosporus are the mineral elements usually lacking and to prevent or correct this trouble these minerals should be added to the ration.

Feeds rich in Calcium are all legume crops, milk, limestone, chalk and wood ashes. Feeds low in Calcium are the cereal grains and most concentrate by-products straw, and root crops. Feeds rich in Phorposus are bran, cereal grain by-products, and ground rock phosphate. Feeds low in Phosporus are the straws potatoes, beet pulp and molasses Feeds containing both Calcium and Phosporus in large quantities are steamed bone meal, bone char and bone flour.

As a lack of either Calcium or Phosporus will produce the same condition in the animal, it is as well to insure a liberal supply of each. Properly balanced rations will do much to prevent the trouble. Steamed bone meal is probably the best feed to use in providing mineral matter as it contains both Calcium and Phosporus. To each one hundred pounds of concentrate mixture add two pounds of steamed bone meal. This should be done summer and winter and is considered just as important in the ration as protein, hay or silage. Mineral deficiency diseases develop very slowly and when established take a long time to correct or cure. Prevention is much better than cure; therefore, minerals should be provided througnout the year. By mixing a small quantity of bone meal in the grain mixture the difficulty of getting stock to eat it is overcome. Bone meal can be fed with the salt, and in the summer may be placed in a box in the pasture field if the cows are not being grain fed.

Salt should always be provided. It may be fed in the grain by mixing one pound of Salt to each one hundred pounds of grain, or it can be fed daily, or put in boxes in the pasture, or salt blocks supplied. Cows require one to two ounces of salt per day.

In areas where there is a known iodine deficiency this mineral should be supplied to guard against goitre. Iodine salt is a very convenient method of feeding, or it may be supplied by feeding potassium iodide. Dissolve one ounce of potassium iodide in one gallon of water and feed daily per animal one tablespoonful of this solution on the feed. This will supply two grains of potassium iodide per head per day, which is the recommended dose.

Sunlight greatly assists in the assimilation of minerals. Cows should be turned out, therefore, on bright days during the winter and have mineral supplied in the summer that they may store up a reserve supply to carry them through the long stable feeding period.

- CONSERVATION -

A WEEKLY COLUMN OF PRACTICAL OPINIONS OF THE VITAL ISSUES AFFECTING THE USES AND ABUSES OF NATURAL RESOURCES BY MR. LUDLOW JENKINS, MARSHFIELD.

THE CRISIS OF 1937

The 1936 attitude of the Biological Survey has been duplicated in the early months of 1937. Drouth conditions which were so serious in Canada and our northern prairie states during the summer of 1936 persisted through the fall and winter, and into the spring of 1937. While the valley of the Ohio was drenched and flooded, the waterless ponds of Saskatchewan and Manitoba gained only a light covering of snow, and dust swept the prairie lake beds of North Dakota and Minnesota.

Mr. Hoyes Lloyd, head of the game protection forces in Canada, and Game Commissioner Morick of North Dakota brought word of this condition to the second North American Wild Life Conference, held in St. Louis in the first week of March, 1937. The continued drought representing together with overshooting, the most menacing situation in waterfowl history, would, one would suppose, make closure of the season the foremost topic of the Conference. In reality the subject was mentioned only in whispers, in odd corners.

Even without a continuation of the drouth, closure of the season is necessary. During the past winter, the Biological Survey made a survey of southern concentration grounds, and report an apparent increase of ducks over the preceding year amounting to from five to ten per cent. But the increase was irregular. Some of the rarer species have continued to decline despite the fact that there was no lawful shooting of them in 1936. Any competent student knows that such a condition calls for closing the season unless the rarer species are to be allowed to disappear. The situation reveals clearly the failure of the "selective bag" upon which the Biological Survey has been relying for the preservation of the rarer species; and it leaves the more plentiful species still in danger.

To appreciate the intensity of this crisis, one must look at the waterfowl problem by decades.

A century ago, as everybody knows, ducks and geese in North America were reckoned in the billions. At that they had against them every known enemy except man, and yet their host was countless. From the Atlantic to the Pacific, the migration every spring and fall meant the movement of a bird army whose aggregate number staggered the imagination.

NINE-TENTHS OF THE BIRDS ARE GONE

Drainage and settlement, no doubt, cut down the numbers of those ducks with limited and southerly breeding ranges, such as the Gadwall, Ringnecked Duck, Canvasback, Redhead and Bluewinged Teal; but the emptiness of well-watered Canadian breeding ponds in 1935 told the real story —the story of destruction by the guns of the white man.

Northern breeding grounds and southern feeding grounds are only ten per cent occupied. Why harp on the disappearance of breeding and feeding grounds? The habitat is still there; the birds are gone.

The Canadian government has charted the diminution of waterfowl; beginning in the 1870's, the descending curve slowly sharpening for several decades, then making a calamitous plunge downward.

Today, according to this Canadian chart, nine-tenth of the birds are gone. Make no mistake as to where they went.

For decades, every butcher shop in the United States was piled high with Wild Ducks during every migration season. The numbers seemed countless, as had the numbers of the Passenger Pigeon. But it was an illusion. Drainage narrowed the feeding areas, heightening the concentration of ducks, and thus increasing the slaughter —and also preserving the illusion of plenty, even while the birds were fast disappearing.

Market shooting and spring shooting were abolished. But still the illusion persisted, for now the ducks were baited, and were drawn in concentrated flocks to the very guns that were exterminating them.

In 1930 the Biological Survey, concluding an exhaustive survey, estimated that the total number of waterfowl left alive was between 80,000,000 and 100,000,000, a revelation which so alarmed the sportsmen that they gave up their seven-year fight against reduction of the bag-limit from 25 to 15 per day.

What is the situation today? The Biological Survey estimated in January, 1935, that during their winter concentration only 17,000,0000 ducks were to be found in the United States and 10,000,000 in Mexico. Are the birds going up or down from these figures? Superintendent Ray Steele of the Upper Mississippi Wild Life Refuge estimate a reduction of 25 per cent in the number of ducks that flew south in 1936 along the Mississippi River flyway. Wisconsin wardens on the same flyway put the decrease at 50 per cent. (Figures given out by Minnesota Game Protective League.)

These reports, made by trained and impartial observers, discredit the numerous "cheerios" of indididual sportsmen (who "saw" more ducks this fall than any time in the past ten years"), and the propaganda statements made by Joseph Knapp's "More Game Birds in America Foundation" after their "airplane survey" of Canada lakes last summer.

The most optimistic of all the reports to which credit may be given is that of the Biological Survey, which finds an increase of five or ten per cent on southern feeding grounds. But what does an addition of ten per cent amount to, when the problem is to bring 27,000,000 ducks back to fifty times that number?

Let us put down in a single column three estimates of waterfowl numbers, making as the first figure a billion, the unit in which waterfowl were formerly reckoned. Here is the result:

1870— — — — — —	1,000,000,000
1930 — — — — — —	—100,000,000
1935 — — — — — —	— 27,000,000

With a progressive increase of five per cent a year, it would take fourteen years to bring the number up to 50,000,000, one-half of the 1930 total. With a progressive increase of ten per cent, it would take eleven years to get back to the 1930 total. And 1930 was the year in which a waterfowl crisis was recognized, th eyear in which depletion forced a reduction in the bag limit, agitated since 1923. Eleven years to get back to a formed crisis!

But, let us take note, this would represent an increase only in a limited number of species, with others still going downgrade—downgrade to extermination.

To Be Continued

Entomology

CHEESE AND FLOUR MITES

Almost all kinds of food stuffs, including flour, cheese, hams, sugar, etc are subject to attack by several kinds of very small, pale-oclored, eight-legged animals known as mites. Though so small as to be scarcely visible, they sometimes swarm over or in infested food products in uncounted thousands.

The question of how these creatures are spread about, of how they appear with such apparent suddenness and of what becomes of them after they have consumed the food which they are eating, has been a source of wonder to many. A knowledge of the life history of these tiny creatures explains these questions. The microscopic eggs of the animals, scattered at random over their food material, develop into small six-legged mites, that shed their skin periodically like insects, increasing in size with each moult, until they reach the adult stage, or in certain conditions they may enter a resistant nesting stage in which they remain until conditions are favourable for new development. In this stage the animal is covered by a tough resistant coat, the legs are shortened and the body is provided on its under side with a number of sucking discs that may serve later as a means of attachment to some passing object, such as a mouse, insect, etc. It is in this way that the mites are spread from place to place and are able to resist long periods of unfavourable conditions, though it is not known what originally causes them to enter this state, as they may do so even when food is abundant.

The small size of these creatures and their resistence to ordinary methods, when they are in their nesting stage, makes them somewhat difficult to handle. Of course fumigation with sulphur, or hydrocyanic acid gas, is satisfactory, when this method is convenient. Where this is not practical, the pantry or store-room should be thoroughly cleaned of all food materials and the entire premises including all cracks and crevices, sprayed thoroughly with benzene and washed out with kerosene oil. Infested hams, after the injured portions have been washed, scraped or cut away, may be dipped in a solution consisting of 1 part carbolic acid, 10 parts alcohol, and 10 parts of water, which will destroy the pests without injuring the meat.

LARDER BEETLES

A brown, hairy, active grub, about one half inch long when fully grown is often found attacking meat and meat products, especially those that have begun to spoil, and is also a permicious pest of museum specimens. The beetles which give rise to those grubs are small, dark-colored beetles with a broad, light-colored band behind the head.

The insect is a rapid breeder and is said to pass through several generations a year. The female deposits her eggs, if possible, directly on the meat, or if not, in the neighborhood of such food. The young, emerging in a few days, attack the outside of the meat, penetrating deeper as they grow and completing their development in about four weeks. The pupae stage endures for from three days to a week or more, the beetles emerging to lay eggs for another generation.

The first steps to take in getting rid of this pest, is to remove infested materials infected parts of the meat cut away and burned and the infested premises thoroughly cleaned up and sprayed with benzene, taking especial care with all cracks and chevices with hydrocyanic acid gas assures adequate control.

When not too numerous, persistent killing of the beetles by hand, will bring results and the use of poison baits, consisting of cheese ground up with arsenic, has been recommended.

AGRICULTURIST

TIMELY NOTES ON TOPICS CONNECTED WITH Silver Fox Farming

A. K. "Ollie" McNeill writing from Fort Qu'Appelle, Saskatchewan, says: "Perhaps you will be interested to know the results of our breeding of white faced foxes this year. The pups have done well and the quality is much improved over previous years. Our first shipment will go forward on Monday the 12th to the Model Mink Farm, Fort William, Ontario. Thirty-one animals, value $10,000. After that we have shipments to make to California, Colorado, Massachusetts, Wisconsin and Washington. Had a cable from Sweden the other day offering $1,000 for a well-marked pair. You will agree with me that the shrewdest ranchers on the continent appear to favor white faced foxes. We are retaining 50 white faced males which I expect to mate with 50 females. We find that line breeding produces excellent results.

"By the way, I visited the Hudson's Bay ranch at Winnipeg yesterday. It is simply wonderful. Mr. Douglas, the Manager, did everything possible to make our visit enjoyable. He showed us some beautiful pups, the offspring of those purchased from the McLure & MacKinnon Silver Fox Farms, Ltd. They were excellent. I also noticed some very fine young fisher, almost as large as the mother. He has had wonderful success with his mink, both in quality and production. A flock of sheep helped to keep the weeds down in the ranch and ducks and chickens picked up the scraps out of the mink sheds, which I thought was a splendid idea. A beautiful landscape with flowers in bloom and gravel walks makes the approach to the ranch very attractive while Hudson's Bay Special and Mr. Douglas' cake made the visitor feel that the H. B. C. should have a generous shipment of furs this season."

The above is just another instance of a successful Islander abroad, and I am sure there is no one that begrudges the splendid financial returns which he is receiving because of his astuteness in blazing a trail off the ordinary paths. You know it was a terrible crime, punished by the death of the fox, to have white-legged silvers in your ranch if you were in registration. However, you will also remember that we invariably found the white-legged foxes had good fur qualities, often superior to others, and usually a very clear blue black. No doubt the Solons who made the laws sincerely believed they were right, but who can judge the vagaries of fashion, and it would seem that too close regimentation of standards is not to be desired after all.

We have been asked to again sound a warning in regard to the presence of dogs and cats on silver fox ranches. The best authorities in the United States are against the practice, and even though you are a dog lover like ourselves, it is safer we are sure to give away your faithful canine to some party not in the fox business, rather than have a possible source of distemper on your premises. Not only that but employees of fox farms should not be permitted to have dogs or cats. This is the dictum of Dr. R. G. Green, noted authority on distemper and other diseases, and many other prominent scientists.

Distemper has been very severe on mink and fox ranches throughout the United States. Encephalitis has also taken its toll as well as para-typhoid, and almost every scientific source, governmental and private, that has to do with animal diseases, are utilizing their energies to combat these scourges. Late numbers of the American National Fur Journal and the American Fur Breeder, have authoritative articles on distemper control and other infective diseases.

Professor Pinkerton of the Harvard Medical School, Boston, has made good progress in distemper research. He does not believe that very much can be accomplished in the control of distemper epidemics by the use of immune serum even if the cost of such treatment could be lowered to a point where it could be possible on a large scale. Vaccination, on the other hand, seems to have much greater possibilities. He states there are several different strains of distemper and that vaccination with one strain of virus may be ineffective against another.

His methods of vaccination is to use ranch-made vaccine from the tissues of animals dying on a ranch. In that way the possibility of using the wrong strain is eliminated, so that from a practical point of view it makes little difference whether the strain in question is canine distemper or some other strain as long as we are sure that it is distemper.

For any fur farmer who has established a positive diagnosis of distemper in his minks or foxes, detailed information as to how this vaccine has been prepared on the ranches where it has been used is available by application to Dr. Henry Pinkerton, Professor of Pathology, Harvard Medical School, Boston. This may not register with us now, but one never knows when the dread disease may strike a ranch and it is a good idea to remember Dr. Pinkerton's address.

"What I See After You Produce Them," is the title of an interesting article by Hans Staudt, New York fur silver fox pelt grader. It is a feature article of the American National Fur and Market Journal, September number. These are extracts:— HANDLING. In grading your pelts we notice that although there has been a great improvement in the handling, tailoring or preparing for market, there is still room for further improvement and yet more attention should be given towards having pelts of the very best appearance. As you no doubt realize, it is the first glimpse or the attractiveness of a silver fox pelt that really helps make a sale.

I have noticed that a considerable amount of fox pelts are not placed on the proper sized boards and at times enough care is not taken to see that they are not overstretched. It is very detrimental to stretch any pelt in width as it takes away a good percentage of its character. In the first place pelts should not be over-stretched but should be placed on the proper sized boards and if there is any slack it should be taken in the length not in the width. When you stretch a pelt slightly in length you enrich its character and you increase the volume of fur, but when you stretch it in width you naturally kill the beauty of the character and thin the fur.

THIN IN NECK. I have also noticed that a very large percentage of the fox pelts are very thin or weak in the neck. Of course fox skins prime last between the shoulders and the head, causing a somewhat weak condition. You can help this condition by preventing any over-stretch of the neck of the pelt, not only in the pelting but in the stretching on the board and drying. As an example, very often in pelting a fox a rancher will work the leather down to the forepaws and from there just give it one yank. This weakens the leather very much when it is green and thins out the shoulders considerably.

As another example, when placing a fox pelt on the board even if you do not stretch it and only lay the pelt on the proper sized board, when it is drying and you have not protected the neck at all, the leather of the rump and the back is much stronger than from the shoulders to the head. There is a certain percentage of shrinkage in the drying and, naturally, the stronger has a tendency to pull on the weaker. This also thins out the fur without your knowing it. As mentioned before, this can all be prevented by placing the fox pelt on a board of suitable size for that pelt. Do not attempt to stretch it —just place a tack or two in the rump, then turn your board around and hold in slightly from the fore paws to the head. Some ranchers place a few tacks across the back in order to prevent the holding in

(Continued on page 13, Col 8)

Well Drilling

Communicate with

Trask Well Co., Ltd.

Vaughan H. Groom, Summerside

Manager for P. E. Island

LIME

In accordance with the P. E. I. Department of Agriculture policy of assisting Island farmers to obtain Ground Limestone at low price, we are now prepared to ship lime in carlots of thirty (30) tons or more to all Island points at two dollars and eighty cents ($2.80) per ton delivered in bulk and three dollars and fifty-five cents ($3.55) per ton delivered in bags.

These prices are in effect until Dec. 31st, 1938.

Brookville Manufacturing Co., Ltd.

Brookville, St. John County, N. B.

H. G. S. ADAMS, MANAGER.

R-M ROSS MILLER

SUCCESSFUL FOX MEN say FEED THE ROSS-MILLER way

WHAT WILL THE HARVEST BE?

You've bred them; and you've fed them. Now you must finish them. And right here is where you'll make your profit—or come out in the hole.

The difference between profit and loss, lies in the finish. It's the colour . . . the sheen . . . the gloss that adds the profit. The finish is what the fur buyers look for after they get a bunch of skins to go over. The fur that has quality they want gets the good price. If it lacks finish all the rest of it doesn't count much.

Finish your fur the Ross-Miller way—using the Ross-Miller pelting ration, Vita Crumbla "A" (Reg'd.), with R-M Standard Cubes (A) for Sundays and emergency occasions. Build up a profit this fall. When pelting day comes, you'll reap your harvest. Samples and feed schedules for Autumn on request. Write us.

AGENTS—J. Robert Mutch, Charlottetown, Brace, MacKay and Co., Ltd., Summerside. The Hall Mfg. and Cold Storage Co., Limited, Summerside.

ROSS-MILLER Biscuit Co. Limited NAPANEE • ONTARIO

FOX FOODS

A LARGE PUP CROP

Insure a large crop of healthy, vigorous pups this year by feeding

ROYAL FOX FEED

Results during former seasons shows that the use of Royal with a good meat ration is the most positive way known for the rancher to secure best breeding results.

Insist on Royal.

Ask your dealer today or write direct to

The St. John Milling Company Ltd.

Saint John New Brunswick

Nicholson's Fox Health

(3 FEEDS FOR 1 CENT)

A Dover, New Hampshire man has a red ear of corn which is 30 year old and which has done much service at corn-huskings. We blush to think that we had forgotten all about that kissing game.

This Dover man's trick seems a bit shabby; but that's the only way some men can get any favors from the chickens.

The Silver Fox Exhibition at Charlottetown will be on October 31st to November 4th.

Brushing your foxes is now a popular pursuit. You could hardly call it a pastime but it adds value when the foxes come on the table in the show ring or the pelts on the market and so does a nice finish like polished apples which "Nicholson's Fox Health" put on the pelts. Nothing like "BLOOM" to bring the bids.

This powder is put up fresh as ordered. Price 3½ lb. box $1.50. Send money order for what you want, will be delivered free if you mention this paper. Can supply any quantity.

Dr. J. M. Nicholson, 202 Kent St., Charlottetown, P. E. I.

L-1411-9-17-1-21.

SOPEX

KILLS EAR MITES FLEAS AND LICE

Used and recommended by fur breeders throughout the world. Sopex has been known to save many chewed tail tips.

Insist on Sopex—sold at druggists and fox supply houses.

BRITISH MADE Fully Guaranteed

COOPER PRODUCT

Canadian Distributors:

CANADIAN CO-OPERATIVE WOOL GROWERS LIMITED

Quebec and Maritime Branch, LENNOXVILLE, QUE.