

FOR FARMERS, STOCK BREEDERS AND GARDENERS

Replies To Questions

GEORGE ENNIS SMITH, SUPERINTENDENT EXPERIMENTAL FOX FARM, SUMMERSIDE

Question: Each year a large number of my vixens have milk troubles at whelping time. Would it be if I fed cow's udders?

Answer: A large number of years the Experimental Fox Ranch has had inquiries concerning the feeding of cow's udders to pregnant foxes, as many fox breeders believe that these would help to induce a development of the milk glands. We have fed cow's udders in our experimental work before whelping time, but up to the present time there has been no evidence that there has been any advantage in feeding them and the evidence as a whole would indicate that they had no influence in counteracting milk trouble. Naturally the question arises, what causes the milk glands to develop? The answer of course is immediately forthcoming that it is the development of the foetus in the maternal body. The next question is, are there any organs that pour secretions into the blood stream that have an influence upon the development of the milk glands? The majority of breeders are aware that there is a number of internal glands that pour secretions into the blood stream that are necessary to maintain life. Some of these are thyroid, parathyroid, thymus, pituitary bodies, adrenal glands besides a number of others. A great deal of experimental work has been carried out with other animals on the influence of the extracts of these glands on lactation. Some experimental work would indicate that both the pituitary bodies and the adrenal glands have a definite and specific function in the control of the development of the milk glands. The pituitary bodies are situated at the base of the brain; the adrenal glands at the base of the kidneys so that if this fox breeder wishes to feed any particular class of meat, that may help to overcome milk trouble with his vixens at whelping time, we would recommend him to feed some brains or once a week and also some beef kidney once or twice a week. In reply to this question we would, therefore, say that we do not think there is any advantage in feeding cow's udders. If there is any choice we would recommend brains and beef kidney.

Question: Do you advise feeding four or five day old calves? Would two or three month old calves be all right to feed?

Answer: We would certainly warn fox breeders against feeding four or five day old calves to foxes in any shape or form. Young calf meat contains a gelatinous substance which has a poisonous effect on the animal's system. Also the calf meat itself appears to inhibit a secretion of the gastric juices and leads to very acute indigestion. Young calf meat is a very good way to get indigestion trouble. With regard to two or three month old calves, there is a question of whether there is any advantage in feeding them. We would certainly not recommend them to be fed in the ordinary manner, that is, to be cut into chunks and fed to the foxes. If the whole body of the calf was ground small, bones and all, and then the whole mass cooked well, it might be all right to feed during the summer time,

but it would want a great deal of cooking. In reply to this question we would warn fox breeders against feeding two or three day old calves to foxes. With regard to calves that are two and three months old, we would recommend that they be well cooked before being fed and to only feed them during the summer months.

Question: I have been feeding milk bread and tripe once a week to all my foxes. Would it be all right to feed it often?

Answer: We would certainly recommend fox breeders to feed this mixture daily to all their pregnant foxes for a month before they whelp. It will not, according to our evidence, increase the amount of milk when the females whelp, but it will improve the quality. The trouble with the rations that are being fed to foxes in captivity at the present time is that they cause the vixens at whelping time to have too much milk and that is the chief danger with a high meat ration. The females have ten times too much milk and it can be safely said under the present conditions that the less milk the vixens have when they whelp, the better it will be for the pups. The tongue of a new born pup is one of the strongest pumping machines that I have ever had an experience with. The tongue is very broad and flanged and if the pup has any strength at all it seems to be centred in its sucking ability, and he is some sucker. As I have said previously, with a high meat ration there is too much milk, but it is too poor in quality and is thin and has a low fat and total solid content. When milk is fed it tends to lessen the amount of milk, but improves the quality. In reply to this question we would recommend fox breeders to feed a mixture of bread, tripe and milk to all their pregnant females each day for one month before they whelp.

Question: I have been feeding my foxes mostly meat and biscuit. I would like to feed other things, but I am afraid to change the food at this time. Would it be safe?

Answer: Each year the Experimental Fox Ranch gets a number of letters from fox breeders all over the country saying that they are afraid to change the food of their foxes because they think it will upset them and this idea, wherever it arose, appears to be ingrained into the minds of the majority of fox breeders. What gave rise to it is hard to tell, or why fox breeders should ever hold to it for one moment is hard to conceive. Every housewife knows that it is a relief to go and taste somebody else's cooking. Every man knows also that if he goes on a holiday, he enjoys a change in the food and feels better for it. Nothing is more monotonous than eating in a restaurant. You seem to be having the same food at each meal, but a person who has been living at home will invariably enjoy and feel better for a decent meal at a restaurant. The majority of the observant fox breeders are aware that if there are any new foxes being brought to their ranch, they will always do better for the first month or so. A change is as good as a rest is an expression known to all. Why fox breeders should expect to have trouble in making a change in the ration is hard to conceive.

The Experimental Fox Ranch certainly takes the position that any reasonable change in the diet will not upset the foxes. In fact it

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Gardening

SWEET PEAS

To many the sweet pea is the favorite flower, but after a few unsuccessful trials we have too often given up its cultivation and depended upon our hard-earned money to provide an odd bouquet once in a while. This is unfortunate, as the sweet pea will thrive and produce wonderful bloom almost anywhere in the Dominion. Like most good things, only a little care is necessary. An early start is essential. Usually there comes a time in March or April when we can work a bit of our soil for a few days and it is then that we should plant the sweet pea which must get its growth while the weather is cool. Dig a trench a foot deep, and in the bottom put a few inches of well rotted manure or leaves, or any other decaying vegetable matter. Press this down well and add three inches of the best garden soil you can secure. Plant seed two inches apart and the same deep and as the plants develop, gradually fill in the trench level. This treatment encourages deep rooting in cool earth. Provide from three to five feet of climbing support in the form of brush, an old tennis net, strings or wire. The last is the poorest of the lot because it may cut tender growth or burn it when the weather turns warm. A little commercial fertilizer dissolved in water and carefully applied so that it will not actually touch the plants, is also advised. Cultivate thoroughly, soak with water in dry weather, and you will have abundance of bloom from July until frost. Never allow the flowers to go to seed, or bloom will cease. A few special colors and new varieties will cause your neighbors to come and enquire and envy.

AN EARLY START

When spring really arrives Canada enjoys the finest climate in the world for most vegetables and flowers, but of course it does not last as long as many of us, even the devotees of winter sports, desire. To get the most out of this period we really should start some of our vegetables and flowers from seed indoors, and by this method add weeks to the season without going to the considerable expense of purchasing started plants. A hot bed is the best thing, though good results are obtained by using flat boxes in a sunny window. Make hot bed in early March. Get a supply of fresh horse manure which has been turned frequently to prevent burning. Dig a hole as big as the window sash you are to use or build above the ground by a wooden frame and boards. Twelve to eighteen inches of manure well pressed down is needed, and on top of this put two inches of fine garden soil. Cover with glass, the same to slope to the south to catch the sun and allow the rain to run off, and it should be about a foot above the earth. The sides, of course, are boarded up to keep out the cold air. Allow the bed to heat up for a week and when it cools down again sow your seed about an inch apart, watering carefully through a coarse piece of sack spread over the soil to prevent the seed washing out. If you are using a sunny window, follow the same procedure, only a box three inches deep with two inches of soil. Thin out when plants start to develop their second set of leaves, and when still bigger, transplant to a cold frame, the same as a hot bed only without the manure, or another box, and harden by removing protection gradually until the plants have practically outdoor conditions. Among the flowers, anything that will transplant like Zinnias, Asters, Petunias, Cosmos, Marigolds and others so specified in the seed catalogue or on the seed packet may be handled in this way and the blooming period hurried several weeks, while there is a long list of vegetables like cauliflower, pepper, celery, egg plant, cabbage, tomato and head lettuce. Some very early things like lettuce and radish can be grown entirely in the hot bed and will be ready for the table months before the stuff sown directly outside.

GOOD SEED IS THE FOUNDATION

Do not be fooled about the tales you hear about all seed coming from the same source. There is a wide variation in this, prices running from a few cents an ounce for some several dollars, and all of the same name. Then, too, while

Care And Culture Of House Plants

(By Gordon C. Warren, Dominion Experimental Station, Charlottetown, P. E. I.)

Our homes, especially during the winter months, are much too hot and dry for most plants. High temperatures combined with too little sunshine produce weak, spindly growth and under such conditions flowering plants often drop their buds. As the home can only be modified to a very slight extent, plants must be chosen that can adjust themselves to such environment. Many failures to grow plants successfully are due to: Faulty drainage, careless watering and insect injury.

SOIL—Sods and barnyard manure composted and allowed to rot make splendid soil for plants. To this may be added a small amount of rotted leaves or other organic material. When potting ferns add a larger amount of leaf mold.

POTTING—The best time to shift house plants is in early spring. Geraniums, begonias, coleus and similar plants that have become unshapely should be cut back at this time. Plants rarely need repotting during the winter months. Do not over pot. Flowering plants need to be root-bound to flower freely. When potting make sure drainage is provided. A piece of inverted crock over the drainage hole with a small amount of broken crock, gravel or cinders is excellent. Cans or other utensils in place of pots are not recommended, but when used should have an outlet for water at least one half inch at the bottom. When repotting it is well to remove a portion of the old soil and roots. Plants or cuttings should be set firmly, care being exercised that the roots are not injured. When completed the soil should be one half inch below the pot rim.

WATERING—After potting, the plant should receive a liberal watering and then no water given until needed. Blooming plants require more water than the slower growing plants such as palms. With a little experience one can tell when plants really require water. The appearance of the plant is, of course, a good indication of its requirements. A method commonly followed is to tap the pot with the knuckles; if it has plenty of water the sound is dull, if it is dry the pot will ring. Occasional syringing is beneficial, especially for ferns and other foliage plants.

JARDINIÈRES—If properly used, the jardinière is a source of added beauty to our plants, but ordinarily causes great injury. This injury results from stagnant water collecting in the bottom of the bowl causing what is termed "wet feet". This may be overcome by placing a few inches of gravel or an inverted saucer in the bottom for the pot to rest on.

INSECTS—Red spiders thrive under house conditions and are hard to overcome. At the Experimental Station at Charlottetown good results were obtained by dusting carefully with flowers of sulphur. Sucking insects are controlled with nicotine sulphate. One teaspoonful to one gallon of water; biting insects with a tablespoonful of arsenate of lead to the same amount of water. Scale insects on ferns may be controlled by miscible oils now on the market.

certain varieties may give wonderful results in England, or the Southern States they may be a failure here. Reputable Canadian seed houses select their seed from those sources which turn out stock especially recommended to Canadian conditions. Naturally, if they didn't they would not remain reputable very long. You may have perfect soil and be willing to forego golf or fishing for several weeks and take all you exercise with a hoe and rake, but without good seed you haven't a chance. Remember, too, that good seed is grown by experts who specialize on one or two lines and have space sufficient to prevent bees and other insects mixing pollen and, therefore, strains and varieties indiscriminately.

GIRLS TO GRADUATE

CALGARY, Alta., March 17. — (By the Canadian Press) — Twelve Edmonton lassies will graduate from the Technical School shortly as full-fledged automobile mechanics when they will enter a field of endeavor usually reserved for men.

It has also been disclosed by the Calgary Institute of Technology and Art that a Calgary miss is diligently studying to become an aeronaut expert.

NEWSY NOTES

BY AGRICOLA

BIRD PROTECTION

The usefulness of the Audubon Society has been stressed from time to time in this column from both the practical and the sentimental side. Let me remind my young readers that this Society (whose address is 1974 Broadway, New York, U. S. A.) publishes a series of pictures of American (and Canadian) birds; each picture being illustrative of a single species, and all are exquisitely colored. The price is popular and one may select from the list only those species known to occur here.

The Society is glad to help rural teachers in Canada to form affiliated branch societies. I know of a school which had an Audubon Society among its activities for several years, and it was astonishing to observe the interest the scholars took in this subject.

However, this is by the way. What I set out to do was to give an account of how the Society staged a come-back for two kinds of birds which were almost exterminated, as told recently in the Boston Transcript.

Sea gulls are now recognized as necessary scavengers of the ocean and most civilized states protect them, but this was not always so. Thirty years ago the Herring Gull was on the verge of extinction, for there had been for some years an indiscriminate slaughter of these birds all down the Atlantic coast, to supply wings and plumage to the wholesale military trade of Boston, New York and Philadelphia.

Seeing the precarious position of these gulls, the well-known portrait painter, Abbott H. Thayer, came to their rescue. He raised the sum of \$1,400 and presented it to the Audubon Society for the purpose of providing sanctuaries and bird wardens. Lighthouse keepers, and others on the islands of the Maine coast were chosen as wardens, and a protection was definitely set up. The Society carried on till most of the State legislatures saw the folly of permitting the wanton destruction. So successful have these efforts been that now there is computed to be half a million gulls on the Maine coast, in place of the few hundreds observed in the early 1900's.

Another bird which was almost a "has-been", was the Double-crested Cormorant. In 1908 the bird was known to breed only at Black Horse Lodge, Isle au Haut, Maine; and never more than five nests were found—often only one or two. This went on for a few years till the birds caught on to the sanctuaries, and then they got a real foothold and began to multiply. The cormorants are curious and attractive birds "and are likely soon to become a vacation day asset that Maine publicity promoters should not overlook." Last year a survey by the Audubon Society found five distinct colonies, comprising 1,700 adult breeding cormorants.

In the same survey it was found that the eider duck was increasing on the Maine coast. During the cruise of inspection last June and July, 165 adults were seen, 23 broods counted and 27 nests found. Under the protection of this Society the razor-billed auk, herring gull, laughing gull, common tern, Arctic tern, roseate tern, great blue heron and black-crowned night heron, all are becoming numerous. Most of these figure in the list of Island birds which was published in The Guardian, a couple of years ago.

THE WIND ELECTRIC PLANT

An expense that falls on every radio owner is for the charging of the storage battery, and if he happens to live at a distance from a charging station he is put to inconvenience as well as expense. To such a person the wind electric charger will surely come as "a boon and a blessing." At a very low cost, any one of average mechanical ability may construct a charger that will give efficient service in a wind 12 m. p. h. and upwards. The proper dimensions

and pitch of the propeller are of first importance, since the generator requires a speed of about 1400 revolutions a minute. Too long a propeller will give power but will reduce speed.

Although designed for radio service in the first instance, we occasionally light the living room by means of this little plant, using either one or two 21 candle-power lights. One such light, it may be said gives a superior illumination as compared with an ordinary oil lamp, while two lights give quite an urban effect!

Radio batteries should never be allowed to remain discharged for long periods, as is the custom with some owners; it is never possible to charge them to full capacity again as the plates deteriorate under such treatment.

INDIAN MEDICINE PLANTS

Acer saccharinum L.—Soft maple, silver maple. Sugar was very generally made from this maple. Some of the tribes made a black dye for leather in the following manner: twigs of this maple were boiled and the liquor saved. In the meantime, some clay impregnated with some compound of iron, was mixed with grease and roasted. Then the liquor from the twigs was mixed with the roasted clay, and into this, tanned hides were put to soak for 2 or 3 days to get the right color. The shorter time made them brown, and the longer time a fine black.

Acer negundo L. The Box-elder. This also was tapped for sugar. The Dakotas and other tribes made charcoal from this tree, which was used in the ceremonial painting of the person, and also in tattooing.

Impatiens pallida Nutt and T. biflora Walt. Jewelweed, Touch-me-not. The stem and leaves of the jewelweed were reduced to a pulp and applied to the skin as a cure for rash and eczema.

Vitis vulpina L. Wild grape. Ranges north to N. S., but grows well here where introduced. The fruit was used as food, fresh in the fall, or dried for winter use. A favorite beverage was obtained by tapping the large vines, and drinking the juice, which tastes exactly like grape juice.

Tilia americana L. American Linden. The inner fibre of the bark was spun into cordage and ropes, and woven into matting.

THE BREWERS LAMENT

It was many and many a year ago that "Punch" published a cartoon depicting a well dressed but inebriated gurgling along the street, while a British workman, with his tool-bag over his shoulder stood at gaze; hopefully saying, as the legend intimated, "I'll be like that on Saturday night!"—i. e., after the lad got his "pay."

Doubtless in those days, two generations ago, serious-minded folk took Punch to task for joking over a deplorable matter, but ridicule will often accomplish what the most reasonable argument cannot. That generation passed away and with it the top-hatted bacchanalian. To be intoxicated in public was no longer "respectable." That was so much to the good, of course, and it seemed as if John Barleycorn had lost the first round.

But, on the statistics, the new generation was consuming both fermented and distilled liquors in a fashion that put Punch's top in the dense shade: the per capita consumption almost doubled. The strange part was that there were seldom any visible signs of this, unless one searched the slums of the cities. Some supposed that the British were becoming immune to the effects of alcohol.

Experimental Station Leads

REPORT OF THE PRINCE EDWARD ISLAND EGG LAYING CONTEST FOR THE WEEK ENDING MARCH 5, 1932

Table with columns: Stand., Name and Address, Pen No., Eggs Laid, Points, etc. Lists various participants and their scores.

Table with columns: Pen No., Eggs, Points, etc. Shows production per week and leading hens to date.

BREEDING FOR EGG PRODUCTION AND SIZE

(Experimental Farms Note)

The selection of the breeding stock on the basis of production is probably the greatest single factor in increasing the production of the individual birds and, consequently, the average of the entire flock.

At the Dominion Experimental Station, Kapuskasing, Ontario, the exact egg production of each individual hen is obtained through the medium of the trapnest. This, together with the individuality and general type of the birds is used as the basis for utility selection. By this method, only those birds which have pedigrees showing high production of good sized eggs and are also of desirable type are used for breeding purposes. Particular attention is given to the selection of the males used, and those whose sisters and daughters prove to be high producers are retained and used for a number of years.

The results of this simple method of selection are very well illustrated by the following figures which were obtained over a period of eight years. In 1923 there were only 37 hens with production from 150 to 225 eggs in their pullet year, with an average of 176.6. In 1930, 110 hens had a production from 200 to 312 eggs and an average of 232.2 eggs. Only those birds, which have produced that number of 24 ounce eggs are used for breeding and this has reflected greatly on the quantity and quality of eggs produced by the whole flock. The average production of the 300 pullets kept at this Station during the six winter months of 1923-24 was 32.3 eggs per pullet while during the winter 1930-31, they averaged 104.7 eggs per pullet.—A. Belzile, Dominion Experimental Station, Kapuskasing, Ont.

is another factor in the change though less than may be supposed, seeing that the alcohol addict usually allows no consideration of cost to stand in the way of his gratification.



IMPERIALS

Successful fox ranchers feed IMPERIAL FOX BISCUITS because they contain food elements essential for health, strength, and successful propagation. IMPERIALS should be fed liberally now to vixens as they supply elements necessary to ensure large litters of strong pups and maintain health and vigor of vixens. IMPERIALS fed during this season richly repay in generous results. IMPERIAL BISCUIT COMPANY, Ltd. Charlottetown, P. E. I.

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