

can be utilized for
res, etc. The barn-
—on plan an allow-
t.
give a southern ex-
se, with grass lawn
nt. The vegetable
allow of vegetable
th, and gives ample

to suit the require-
or entrances should
should be absolute-
lanting is done.

outside belt should
willows. The main
e of maple, ash, elm,
he trees should be
way. Between the
he west and north of
suggest a hedge of
al standard tree to
should be bordered
ic, Tartarian honey-
Rugosa roses, etc.,
b borders perennial
re, larkspur, Iceland
ged with very good
s would be a good
eens such as white
cotch pine.

e, covers an area of
00 feet east and west
quire about 10,000
he tree belts as re-

NORMAN M. ROSS.
nting, Indian Head.

from Trees

about which the grass
ld we go about it to
chance?

H. THOMAS.

re the rainfall is com-
to grow forest and
where the rainfall is
cultivate around all
y tall and thick on
and weeds by their

ected and a sod has
tree, I would advise
should be broken up
a breaking plow, and

where the plow cannot reach, the sod should be turned with a spade. It will then soon rot and will become plant food for the trees, instead of robbing them of moisture and food. No grass or weeds should be allowed within several feet of an avenue tree, particularly if the tree is an evergreen like spruce or pine. No system of watering will take the place of cultivation. A writer from the semi-arid portions of the United States recommends that all trees and shrubs be "watered" with the hoe. Frequent cultivation has all the advantages of watering with none of its drawbacks, such as the caking of soil and the production of shallow roots. No person should plant more trees in this country than he can keep free of grass and weeds.

M. A. C.

S. A. BEDFORD.

* * *

We want to borrow or buy a first-class photo of a wild rose bush in bloom. Will one of our readers help us to get one?

* * *

The Forestry Branch of the Department of the Interior is preparing a report on the timber resources of the country, and the rate of depletion, with the object of encouraging conservation and of creating sentiment in support of forestry departments in each of the Provincial governments. This is a matter that requires immediate attention. Our methods of forest destruction are almost criminal, in view of the fact that the supply is so limited, and the time required to replenish the stock is so long. Public opinion should support, and enthusiastically endorse any well directed move toward conservation.

POULTRY

Advantages of Duck-raising

Advising duck rearing to men who speak of their farms in square mile terms and sell their products by the carload, needs some explanation. We are not trying to induce these men to quit wheat farming and go in for duck raising. All we desire to do under the above caption, is to point out to several thousand others, who are not into the farming business on quite so large a scale, some of the advantages which duck raising offers, as a side branch of the business in which they are engaged.

Poultry is perhaps the most neglected department of the average western farm, and duck raising the least developed branch of the poultry industry. Exactly why this should be is not clear to the average individual. Reference to the wholesale prices for ducks, quoted week by week in this journal, does not indicate a condition of affairs similar to that pertaining to our other lines of live stock. The industry is not handicapped by low prices as cattle feeding and hog raising is. Comparison of the prices paid for poultry in Winnipeg with those paid in our eastern Canadian markets, and for ducks particularly, shows a good advantage in favor of the western grower. The fact of the matter is that the greater part of our domestic duck supply comes from the east, and the prices made for this commodity in the western market is simply its cost in the east, plus, the charges for bringing it here.

In these circumstances ducks figure into a profitable branch of farming, and one in which there is little danger of our supply ever glutting the market.

Aside from this, the duck business offers some other advantages peculiar to itself. Ducks are notoriously the least subject to disease of any class of poultry. Losses in raising ducklings are insignificant as compared with those occurring in the rearing of chicks. With the exception, perhaps of guinea fowl, no class of poultry are more hardy. Ducks are grass feeders it is true, but given a cheap bulky ration the cost of raising them is no more than chickens, and when one figures out the number raised from a small flock of breeding stock, they count into profit in young reared much faster than hens do. Not having had the laying tendency developed in them as hens have, stock reared is the only source of revenue from ducks, that, and the value of the feathers produced. But these two items turn into pretty fair earnings on the capital and labor employed in the business when one figures it out. The percentage might astonish some who consider the business too insignificant to receive attention.

Several articles bearing on duck rearing are published in this issue. They are written by

men and women qualified by experience in the business and are sufficiently to the point in each case to bear out all that has been said here in support of one of our neglected small industries. Some readers, it is hoped will gather inspiration and ideas from perusing them. This country should be self supporting in the sense that it should produce all it consumes, of every commodity it is capable of producing, as cheaply as that commodity may be produced somewhere else.

Exchanging the surplus of one product for practically everything we require, is good business if that one product is produced more cheaply than we can produce any other thing, but the balance is against us as a section or country, if we are exchanging our one product for other things which may be produced at home as cheaply as the product is we are exchanging for them. Trading wheat and cattle to the people down east for poultry products, when we can grow the poultry at home as cheaply as we do the wheat and cattle will never leave the balance with us.

Is Duck Raising Profitable?

A few weeks ago we requested readers who had had experience raising ducks, to relate them for the instruction of others who might be considering this branch of poultry keeping. Four replies to this request are all that space permits us publishing. In them most of the advantages and difficulties of duck raising are pointed out, and it might be mentioned here that practically everyone who wrote, expressed the opinion that the profits from ducks, properly bred, fed and marketed, are sufficient to warrant more attention to this branch of poultry-keeping than it generally receives.

First prize in the competition has been awarded to E. W. Wright, Man., and second to Rosamond Grabham, Saskatchewan. We would like some further information on the marketing of ducks. Is it advisable for those living within shipping of Winnipeg to depend on that city as a market for ducks during July and August? Is the local market in most places large enough to handle any considerable quantity of dressed poultry during the summer season, and are the prices paid for such sufficient to make duck raising profitable?

Trouble Supplying Demand

EDITOR FARMER'S ADVOCATE:

Ducks are one of the most profitable and easiest classes of poultry to breed and raise. First see that you obtain eggs from a good reliable breed. I prefer the White Aylesbury. Unless you can rely on your own stock, select the most even shaped eggs of a sea-green color. I prefer setting them under hens, setting three broods of eleven eggs at a time, if possible, on the ground, not in boxes.

Ducklings do not require much warmth when hatched and one hen can take charge of the three broods. The incubation of duck eggs takes from twenty-eight to thirty days. At the end of that time the eggs should be carefully examined and slightly cracked at the thick end of the shell as the shells are thicker than chickens' eggs and the beak of the young duckling is not strong enough to break through. As soon as all are hatched place the ducklings in a coop with the hen. No food should be given for twenty-four hours. At the end of that time give them a little hard boiled egg and barley chop mixed, lightly sprinkled with pepper. After the third day feed plain chop, not too wet and made into little balls, together with plenty of clean drinking water in a pan or trough. Ducklings do not require water for swimming, but see that the drinking water is kept perfectly fresh and let them have all the green food you can spare, also any worms or snails you can find. Then they will thrive without much attention.

Ducks can be fattened and made ready for market at ten weeks. The main point is to have a good supply of ducklings ready about the time green peas come on the market, when the price is generally \$1.00 to \$2.00 a pair. At the end of eight weeks the ducks should be shut up in a good size pen, with plenty of straw at the bottom and fed on barley meal mixed up into a stiff paste with any milk you have to spare. Give it to them as dry as possible, by the ten weeks they should then weigh four or five pounds each.

If one were living near a town or city I would advise selling privately. There are plenty of hotels and private houses, which, if they can rely on a steady supply, much prefer to buy fresh from the farm. Always keep the quality up and you will always find a ready sale. I always advise plucking and dressing the birds ready for table, as a good many housewives object to the drawing process. All feathers and down should be properly dried and placed away for stuffing cushions, etc., which is another profit. Should the weather be very hot at the time of fattening give plenty of shade to the pen, as ducks are more liable to sunstroke than chickens.

Should one not care to kill so early, and let the ducks mature, I would advise killing about the end of October and placing them in cold storage for about three weeks before Christmas. By October, they should weigh seven to eight pounds, and at the price

Christmas poultry make they should bring in a good profit. In that case they should not be fattened at ten weeks. Once you get the name for good, reliable poultry there is always a demand for your product and you will find the utmost difficulty to keep supply going. Get your neighbors to breed and buy all they can produce.

Man.

E. H. W.

Advices Early Broods

EDITOR FARMER'S ADVOCATE:

Duck raising, I consider a profitable branch of poultry keeping, gets the stock hatched out early in the season. Late hatched ducks do not pay, as a rule, the hot weather retarding their growth.

The early hatched ones, if healthy, should be fed so as to make quick growth, and at eight weeks of age, fattened and killed, in order to secure the best price with the least amount of feed. The feathers of ducks are more valuable for pillows and eiderdowns than fowl feathers, therefore care should be taken when plucking to keep them scrupulously clean. The large wing feathers should be burnt or thrown away.

A good many people complain of their ducks being taken by coyotes when they wander away for water. Mine never go away for water, because, when the nearby slough dries up, I supply them with a large pan of water to drink in. I train them to go into a shed at night and they soon come in at night of their own accord.

The way I manage my ducks is this: I keep the large White Pekins as they mature early. I usually run two or three ducks to one drake, and during the breeding season have a small slough near the house for them to swim in. This slough dries up in the middle of the summer. Then I have to supply them with plenty of water in a large pan. The duck generally lays her eggs early in the morning, in a nest on the ground. To find the nest you have to frequently watch her as she generally conceals the eggs and nest after she has laid. I gather the eggs and keep them in bran till I have enough to set under a hen, but I am careful always to leave one or two of the duck's eggs in the nest, otherwise she may forsake it and build another. When the duck has laid her first clutch she becomes broody, and if I wish her to lay another lot, I break up and destroy the nest she has been laying in. Then, after a week's rest, she generally makes another nest and lays again. The eggs should be gathered and kept the same as before or you may lose them if dogs, pigs, or snakes happen to find the nest. After the duck has laid this second lot and become broody, remove her after dark, to the shed where you intend her to set. I once let a duck sit on eleven eggs, on the nest she laid in, as it was in some bushes not far from the house, and for three weeks she was alright, then only two or three nights before hatching a coyote took her and her eggs as well.

A duck will cover eleven or twelve eggs, but a hen should have only seven or eight, and I find in this climate that if you hatch with hens you should frequently sprinkle the eggs with water. The duck, when sitting, leaves her eggs for food and water and generally returns with her feathers wet, which supplies the necessary moisture to the eggs. I test the eggs several times with an egg tester, and remove the infertile and rotten ones. A day or two before hatching I immerse the eggs in a pan of warm water. After they are hatched put the hen in a comfortable coop, on the grass, and make a wire netting run, for the ducks in front so that they may not wander far away and meet with accidents. Feed them on bread and rolled oats for ten days, with plenty of clean drinking water, but not milk, as that is not good for young ducks. Give them some sand and grit, and gradually whole grain and shorts may be safely fed.

When fattening, I keep them shut up and feed a mash consisting of shorts, chopped oats and barley mixed up with boiled potatoes, buttermilk, house-scrap and green lettuce. Young ducks should be fed five or six times a day but only as much as they will clean up at a time. Ducks can usually be got ready for market, in a shorter period than chickens.

Sask.

ROSAMOND GRABHAM.

Has Trouble Marketing

EDITOR "FARMER'S ADVOCATE":

Ducks are very easily raised, but at the same time there are some difficulties to contend with in the raising of young ducks. I have never had any trouble hatching them, but, of course, success in this respect depends on the fertility of the eggs set. One source of loss is the young ducks getting on their backs, and dying before they are found and turned over. If they get on their backs, they seem unable to right themselves, and simply lie and kick until they die. In a week or ten days they have out-grown the tendency to turn over like this, and it is seldom any number are lost in this way, if one is looking after the flock closely.

Ducks should be watered in a shallow pan which has a few stones in it to keep them from getting wet. If they get into water during the first week or ten days, they are liable to be chilled and may die. If by any chance a young duck should become chilled, wrap it up in a woollen cloth and lay it under a warm stove, or in any warm place until it recovers. The same treatment applies to chickens similarly affected.

By the time ducks are nine weeks old they are ready for market, if they have been properly fed.