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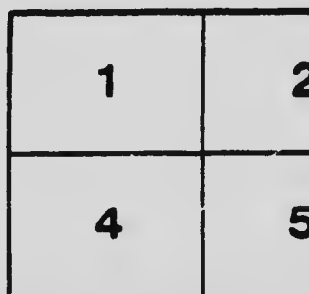
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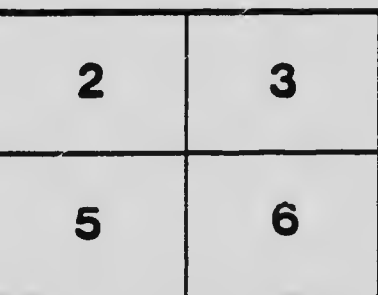
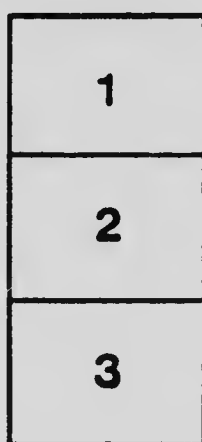
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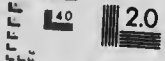
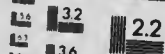
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## PROVINCE OF BRITISH COLUMBIA.

DEPARTMENT OF AGRICULTURE (LIVE STOCK BRANCH).

## 4 (MANAGEMENT OF GEESE.

BY J. R. TERRY, CHIEF POULTRY INSTRUCTOR.



IVEN favourable surroundings, geese are the easiest of all domestic fowls to handle. Where sufficient green pasture and water are available, this class of fowls can be kept very cheaply in this Province. As yet, however, very few geese are being kept. Quite a large number of cold-storage geese are imported into the Province during the winter months to supply the demand. There is apparently no reason, outside lack of interest, why more geese should not be bred.

## BREEDS OF GEESE.

The most profitable are the Toulouse, Embden, African, Chinese, and Canada (or wild) geese. Of the above, the first two breeds named are the most popular. The standard weights are: Adult ganders, 20 lb.; adult geese, 18 lb.; young ganders, 18 lb.; geese, 16 lb. The African weights are as for the previous two breeds. Actually, the weights of the stock kept by the average farmer are in most cases a few pounds less than standard requirements. The Chinese geese are about 6 lb. lighter per bird than the others. The wild goose averages about 10 to 12 lb. for gander and 8 to 10 lb. for geese.

## DESCRIPTION OF BREEDS.

Toulouse, grey and white in colour, are probably the best layers of the three heavy breeds; not such good mothers as the Embden. Ordinarily they do not mate as early in the year as the South African and Embdens, and will generally mate with less females than the other two breeds. For the production of green geese or goslings for early market they are perhaps not quite so good as the others, for, although the goslings attain to a large size, they are not quite so rapid in "plumping." However, when the earliest or first eggs laid are fertile, the additional goslings will eventually prove them as profitable as the other breeds.

The Embden or Bremen geese are pure white in plumage, are fair layers, and splendid sitters and mothers. Like the Toulouse, the ganders are rather slow in mating, and early in the season infertile eggs are often laid. The goslings, however, are quick growers, "plump" well, and make excellent "green geese." They are generally tamer than the other breeds. Another advantage is the fact that the white feathers fetch more per pound than the grey or brown.

The African geese, which are distinguished by the protuberance or "knob" between or just below the eyes, are of greyish-brown plumage, and more pugnacious than the other breeds. They mate early, and on the average the geese will lay more fertile eggs than the others. They are nearly as good layers as the Toulouse, and their young grow fast and will be ready to market quite as early as the Embden.



In some localities African ganders are mated with either the Toulouse or Embden for producing quick-growing goslings. The ganders will also mate with more geese.

The Chinese geese, both varieties, brown and white, also have the "knobbed" head. They, especially the white, lay a large number of eggs. Instances have been known of geese of the white variety laying as many as sixty eggs during the season. This breed is not so hardy as the other three mentioned and are more noisy. They have a very shrill piercing call and are rather timid. The goslings make fair "green geese," but are much smaller than the others. Like the African, the dark plumage is a disadvantage in the brown variety.

The Canada geese have dark-grey plumage, with a white "collar" just below the head. They are sometimes crossed with the other breeds, and produce a very plump hybrid gosling. They are very tame when domesticated, and if kindly treated will follow the attendant around whenever possible. The goslings are generally very hardy, and at from 7 to 8 lb. weight are as plump as a grouse. The geese lay from three to seven eggs, depending upon age. They are excellent for watching purposes at night, and will emit their "honk, honk" at sound of any unusual noise. They should, of course, be plucked, or one wing can be clipped close instead.

Perhaps the best way to start with geese is to purchase mature stock at least two years old—a year or two older the better. Young geese will lay the first season, but if bred the progeny are liable to be weak and unhealthy. When starting, one should purchase in the fall, as oftentimes geese will not breed if moved at breeding-time.

#### MATING.

Some ganders will mate with four or five females, but the writer considers it safer to mate not more than three to each gander. Some ganders are even disposed to pair. It is not a good practice to introduce new geese to the flock at breeding-time, as they are most likely to be shunned by the males. If ganders fight, it may be advisable to separate the flocks at breeding season. Geese breed better if able to have access to a shallow pond or stream.

#### HOUSING.

Excepting in very cold climates, geese need very little shelter, and most of them can be restrained by a 3-foot fence. A low open-fronted shed and fairly dry is all that is needed, unless they are to be protected from vermin at night.

#### FEEDING.

Very little grain is needed if plenty of pasture is available during the spring, summer, and fall months. During the breeding season, however, the feeding of a little wet mash or soaked grain daily will be found beneficial. A mash of one part, by weight, of bran, shorts, and corn-meal or barley-meal, with a little beef-scrap added, has given good results. Shell and grit should be supplied *ad lib.* For a change, soaked oat barley, or wheat can be fed. It has been stated by some writers that geese do not need animal food. The writer has seen both old geese and goslings, about a month old, eating worms at a great rate. During the winter months they should be fed principally on vegetables, such as boiled or pulped mangolds or turnips, carrots, cabbage-leaves, cut clover or alfalfa, and a little bran or whole grain occasionally. It is very easy for the breeding stock to put on fat during the winter; hence the advice to feed lots of vegetables. In severe climates, if the flocks have access to snow, it will be found that a more liberal diet will be needed, as the snow tends to reduce the flesh.

Drinking-water should be supplied in deep buckets if a creek or stream is not available. The supply should be kept as fresh as possible, as geese quickly foul drinking-vessels.

They will generally begin laying in early spring, and if the weather is cold it is advisable to remove the eggs as soon as laid. Old barrels laid on end or large shallow boxes may be placed in sheds or in shady spots for nests. A little straw



should be supplied and the goose will attend to the rest. As a percentage of the first eggs are generally infertile, it is advisable to set them under a common hen, or even in an incubator.

Another reason why the writer favours common hens as mothers is, if the goslings are to be marketed as "green geese," it will be found much more profitable to use the hens for brooding purposes, as they eat considerably less than the parent geese. The latter cannot be penned as hens can—another disadvantage.

The eggs take from twenty-eight to thirty days to hatch, and when using hens it is advisable to select one in good condition if possible, owing to the longer period of incubation. From three to five eggs are enough, according to the size of eggs and hen. The eggs should be moistened daily, and washed if soiled. The writer used to remove the hen daily and dip each egg in warm water for a few seconds from the fifth day onwards till pipping-time. To help the hens, and also to save using so many, the eggs can be run in an incubator for a week, after which they may be tested, and the fertile ones given to the hens. As soon as they hatch they should be removed from the hen and placed in a warm box, otherwise they may be smothered or choked by the hen getting her feet across their necks. They take longer to hatch under hens, so no alarm should be evinced if they take from one and a half to two days to emerge from the shell after pipping.

Goose eggs are more difficult to hatch artificially than duck or hen eggs. A temperature of 102 degrees on top of the eggs (touching) is about right, and they should be moistened by means of a damp cloth or dipped in warm water quite frequently. Moisture-pans should be used also in bottom of incubator all through the hatch. The temperature may be allowed to run up to 104 towards the finish, as this is generally indicative of a good hatch. Care should be taken to remove moisture-pans, so that the goslings may not get wet if they happen to fall into the nursery before properly drying off.

When geese are settling on the eggs, it is advisable to place some grain and water handy to the nest, and a run on pasture is recommended when they come off to feed. Examine the eggs occasionally when the geese are feeding. Any eggs that are fouled should be washed in warm water and fresh straw and nestling material placed in the nest if needed.

Once the goslings are two or three days old, very little care is needed. They should be protected from heavy rain-storms for the first two or three weeks, and should always have access to plenty of shade. If they are to be marketed early, they should not be allowed to swim. If with hen or brooder, they should be given tender shoots of grass or clover cut fine the first two days, and milk (some skim or better) to drink as well as water. After this they should be allowed more liberty on pasture, and should also be protected from the hot sun. If they are to be marketed as "green geese," they should at the end of the first week be gradually fed a wet mash. About twice a day the first three or four weeks will be sufficient. The mash may consist of two parts, by weight, of bran, one shorts, and one barley or corn-meal. Occasionally boiled oats, wheat, or barley can be given. The writer had excellent results with wheat boiled in skim-milk. Care should be taken to see that they get an abundance of succulent green food as well, or else they will go "off their feet" and lose flesh. As much range as possible should be given. Grit and shell should be mixed in the mash every two or three days.

After the first few weeks the mash may be changed to two-thirds barley or corn-meal and one-third bran. Never separate the goslings whilst growing, or they will fret and pine, losing flesh at a great rate. When killing, which should be at from twelve to fourteen weeks, it is advisable to kill them all on the one day, to save the shrinkage mentioned above. A weight of from 10 to 12 lb. can be secured if proper care and attention is given. Special care should be taken against scares by cats, dogs, brooding hens, etc., as the goslings are very timid when raised by hens or brooder.

When reared by geese, little attention is needed, as they appear to be stronger and will generally be able to make fair growth where plenty of green pasture is available. They will take much longer to reach such weights as are obtained by supplementary feeding of grain.



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Various methods of killing are in vogue. The writer has found cutting the jugular vein one of the best methods. The neck can be dislocated as an alternative, or the brain can be pierced by the French method as used in killing hens. The feathers should be carefully sorted, only the down and soft feathers placed together, and the coarse feathers, flight and tail feathers, kept separate. The wing when cut off at the first joint makes an excellent stove-duster or whisk, and is also excellent for cleaning incubator-flues.

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