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# GOAT HUSBANDRY IN CANADA

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THE LIVE STOCK BRANCH  
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DOMINION OF CANADA  
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# The Goat Industry in Canada

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Goat raising throughout the Dominion continues to expand in all the provinces. The province of British Columbia has the largest number of milk goats, due no doubt to the mountainous nature of the province and the mild climate on the west coast. In the other provinces goats are kept mostly by truck gardeners and others living in the suburbs of cities and towns. In Northern Ontario, particularly in mining areas, the goat is coming more into prominence as a source of milk supply for miners' families; likewise in the Maritime Provinces fishermen resident along rocky shore country find the goat to be quite economical from the standpoint of cost of maintenance and capable of providing an ample supply of milk for family use.

There are in Canada millions of acres of rocky country much of which grows some grass and produces abundance of browsing. This country is admirably suited for goats and it is to be expected that as the mining and lumbering industries reach farther into the northland the milk goat will follow settlement and that the industry will continue to expand.

Goat's milk for the most part is produced for family use. It is also sold commercially in considerable quantities and other dairy products made from goat's milk sold commercially are increasing steadily from year to year.

The principal breeds of milk goats in Canada are the Saanen, Toggenburg and Anglo-Nubian. These breeds appear to be hardy for all climatic conditions in Canada, provided they are given reasonable care and management and are housed in comfortable, well-lighted and well ventilated buildings. These are the breeds most readily available, and show enough quality and variation in type to meet all reasonable requirements.

The Toggenburg goat, which takes its name from the Toggenburg Valley in Switzerland, where it originated, rather resembles a deer in its alert expression and active temperament, but is at the same time most docile. The colour



FIG. 1.—Photo typical Toggenburg doe.

varies from fawn to brown, with two white stripes down the face; white around ears and tail and below the knees; the colour markings of the Toggenburg have been so long established that they are a dominant characteristic of the breed, and grade Toggenburgs exhibit them in a marked degree, so much so that they may be easily taken for pure-bred.

Saenen goats likewise took their name from their place of origin in the Saenen and Sennion valleys in one of the northern cantons of Switzerland,

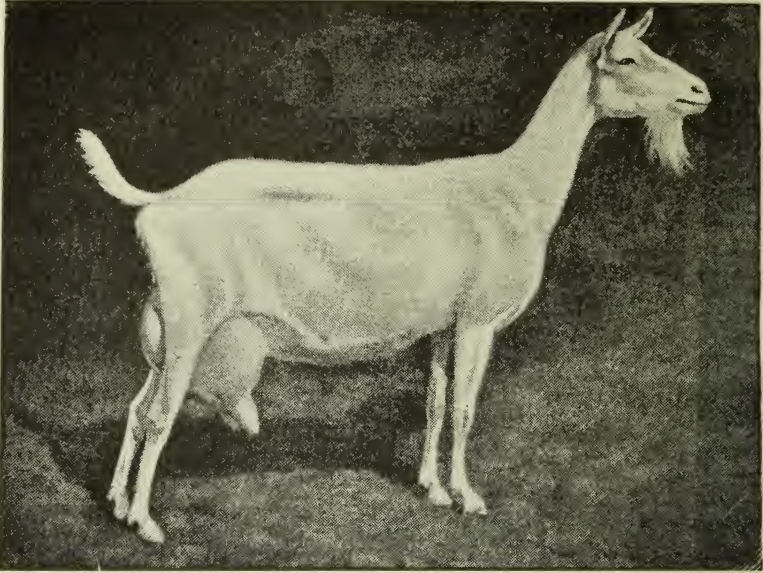


FIG. 2.—Typical Saenen doe.

and are somewhat similar to the Toggenburg, though possibly larger and with a longer and stronger head. The colour is white.



FIG. 3.—Nubian doe.



Both these breeds are consistently heavy milkers, yields of as high as 5 to 6 quarts daily when fresh being fairly common. The stock on this continent and particularly in Canada, however, is being steadily improved so that to-day any goat of these breeds giving less than 3 quarts daily is not worthy of its name.

The Nubian (really the Anglo-Nubian as we know it) is the product of crossing between goats imported from Asia into England and the native English goat. They are larger goats than the Swiss breeds, their chief characteristics being the Roman nose and long pendulous ears. In milk yield they have not equalled the Swiss breeds on the average, although their milk is claimed to be richer. The colour varies from white to black, any colour being allowed. The markings are usually broken and spotted.

#### TELLING THE AGE BY THE TEETH

Goats, like sheep and cattle, have no front teeth on the upper jaw—simply a hard pad of gristle. They have eight front teeth on the lower jaw, and under one year of age these are “sucking-teeth,” small and sharp. At about one year

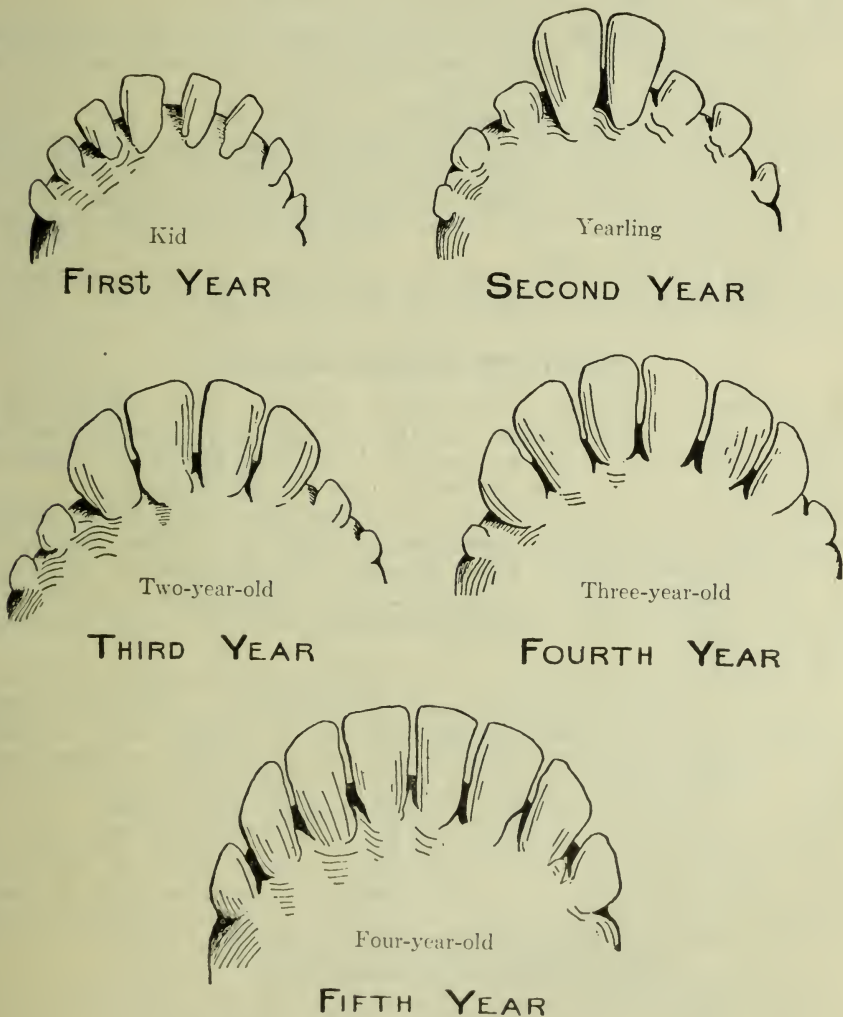


FIG. 4.—Telling the age of a goat by its teeth

the centre pair drop out, and are replaced by two larger permanent teeth. Between the twentieth and twenty-fourth month two more large teeth appear, one on each side of the first pair. In the third year two more come in, and in the fourth year the last pair—one at each corner. At seven or eight years some of these teeth may become broken or fall out, or may be knocked out by accident before that time.

Frequently, however, goats' teeth develop much more quickly than shown below, and many have their full mouth between the second and third year. The precise age at which the teeth are changed varies according to the conditions under which the animal has been reared.

### ADVANTAGES OF MILK GOATS

The goat has been appropriately termed the poor man's cow and certainly no better designation could be found to express the economic advantages that are to be derived from the keeping of goats. Milk goats, however, like other live stock require proper feeding, care and management and unless they receive the proper care and feed the results are apt to be disappointing.

The main advantages to be derived from goats are:

1. A number of well-bred does may be purchased for a small sum of money thus assuring, with a proper breeding policy, a continuous supply of milk for family use the year round.
2. Outlay for buildings and equipment is small.
3. Most children become attached to goats and soon learn to care for them.
4. Many people living on small farms or truck gardens near cities and towns can keep a couple of goats without being under the necessity of any large expenditure for feed thus saving for the most part the cost of the family milk supply.
5. Growing children who learn to love goats and care for them successfully are likely to make a success with other live stock.

### POINTS OF A GOOD MILKER

If intending to purchase a milk goat always go to a breeder who has developed a strain of good milkers. See the sire and dam, if possible, and judge by the general excellence of the does and the buck if the breeder has made selections for milk yield. It is also advisable to see the herd milked.

Always look for a doe that is well developed, that has a smart intelligent appearance with a strong back, good feet and legs, and mellow skin and fine hair. A heavy milker will be wedge shaped; that is, it will be sharp at the withers with compact well laid in shoulder blades, a good spring of rib, a large paunch, good depth of rib indicating constitution and good length between the hook and pin bones.

The head of a good milking doe is refined and thoroughly feminine, the eyes are large and bright and the ears well attached. The neck is thin and fits smoothly into the shoulders, an indication of strength and constitution. The body should be well proportioned, but allowing plenty of room for the stomach. The hind quarters should be long and level and the thighs thin, leaving plenty of room for a wide highly attached udder.

The milk wells should be large and placed well forward. The milk veins should be long and tortuous. The udder before milking should be full and well balanced, coming well forward in front and being attached high up behind. After milking the udder will be thin and elastic, giving no indication of fleshiness. The teats should be placed well apart, having good length so that they may be easily grasped in the palm of the hand.

A mild temperament is highly desirable in milk goats. Nervous goats are usually more difficult to feed and manage, being very often not so satisfactory for breeding purposes.

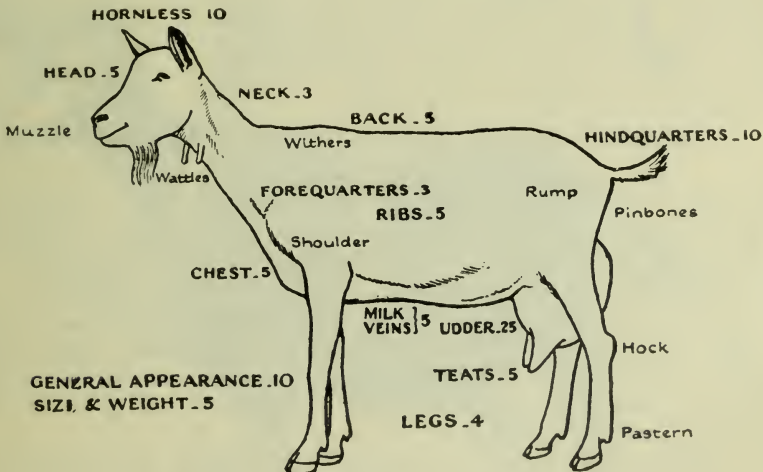
## ADVICE TO THE BEGINNER

Before deciding to keep goats it is necessary to make sure that ample pasture or forage crops can be provided during the summer months and that the main essentials in winter feeds can be grown. This will eliminate the necessity for any large purchases of feed. Having satisfied oneself in regard to pasture and feed, the next step is to provide suitable housing accommodation. Many people will give considerable thought to the matter of breed. In Canada, choice in this matter is practically limited to three breeds, namely, the Toggenburg, Saanen, and Nubian. Probably the best advice to give to those who are undecided about a favourite breed is to attend the goat exhibit at one or other of our larger fairs where prizes are awarded for milk goats. There are good and bad families in all breeds; also some strains or lines of breeding are more popular than others. A further suggestion would be to meet as many as possible of the important goat breeders and discuss with them the merits of their respective breeds.

## BUYING A GOAT

If the intending buyer knows nothing about a goat, he should deal only with a reliable breeder or get a friend who has had experience to accompany him. It is always advisable to see the goat before deciding to buy. There are many poor goats on the market and some people are always ready to unload worthless goats at high prices on unsuspecting buyers. Remember, in buying a milk goat it is milk that is wanted, and, if possible, the buyer should see the goat milked once or twice, bearing in mind the length of time she has been milking since freshening and the number of times she has kidded; a goat is not at her best till she has had her third kid, when she will frequently double the yield she gave at her first kidding.

Spring is the best time for the beginner to buy. At this season, the large majority of does are freshening. If two goats are being purchased it is recommended that a two-year-old doe recently freshened be selected as one of the pair and that if possible, the second doe be in kid to freshen towards the end of the summer. By this means a yearly supply of milk is assured.



**OUTLINE OF STANDARD TYPE DOE  
SHOWING POINTS AND THEIR VALUE.**

(B. C. GOAT BREEDERS ASSN)

FIG. 5.—Outline of standard type doe showing points and their value.



Goats after freshening will usually increase in milk yield for the first month or two, and thereafter will gradually decrease, until at nine or ten months after kidding they will dry up. Goats of good milking strains will often milk well right through the second year without being bred.

Beginners frequently buy a goat said to be in kid, but which does not kid, because goats that have a liberal feed allowance blow themselves out to such an extent that they seem to be pregnant. Buyers should bear in mind that it is difficult to say whether a goat is with kid or not until about six weeks before she is due, when the hard head of the kid may be felt by pressing the fingers against the goat's right flank.

When buying a pure-bred goat, the buyer should see the registration certificate or get an assurance from the seller that the goat is registered as a pure-bred, and the seller should have the goat transferred to the buyer's name in the records of the Canadian Goat Society (Canadian National Live Stock Records) and hand him the registration certificate. It is sometimes advisable to hold back part of the price till the certificate is delivered. A further guide in buying goat stock is to go to those goat herds who have does qualified in the Record of Performance for goats. Does that are out of dams that have produced a high record and are out of sires with high producing ancestry should be capable of high production if given the right care and management.

### PRICES OF GOATS

Prices vary according to demand and supply. In Canada pure-bred and grade goats may be purchased. There are also pure-bred goats that have qualified in the Record of Performance for goats. Progeny from R.O.P. dams would naturally be the highest priced. Those that have won at leading goat shows or are the progeny of prize winners would also command good prices. The beginner will usually be well advised to start with a good grade which at a later date can be changed for a pure-bred animal.

### ADVICE TO SELLERS OF GOATS

At the present time the main market outlet for milking goats is to beginners who are going into the raising of goats for the first time. As a general rule these people are not rich, but will pay around fifteen to twenty dollars for a grade goat recently freshened or due to freshen shortly. It is to be expected that once goat raisers become permanently established, many of them will be interested in the purchase of higher priced stock.

### SUMMER MANAGEMENT OF THE GOAT HERD

There is a great deal of misconception in regard to pasturage for goats. Frequent change of pasture is important, consequently where a couple of goats are kept on a small piece of land or market garden the most satisfactory method of pasturing is to tether. For the best results the tether pin should be moved once during the day, thus giving the goats two fresh pieces of pasture.

In the spring goats may go to pasture at the same time as cows. It is always safest to turn goats to pasture gradually, starting with a half-hour morning and evening and increasing each feeding period half an hour daily until they become accustomed to the green feed. Goats that are tethered should be handled in the same manner.

Heavy milking does need to be watched very closely when being turned to pasture and all through the summer months. It may be advantageous to feed a little hay at night or at milking time, and likewise it may be advisable to continue a light grain ration to maintain the milk flow. Goats may run to advantage with cows or other cattle stock as they eat the shorter grass, and unless the pasture is overstocked there is no disadvantage to either.



Market gardeners may prefer to keep the goats housed the year round, in which case as spring and summer advances they are fed various kinds of green feed or forage crops in addition to hay and grain. Market gardeners usually have a large supply of vegetable leaves, corn husks or other refuse feed which is relished by goats, and in this way they can be fed at a very low cost and their milk flow be well maintained. The main essentials in feeding goats, as with other classes of live stock, is regularity in feeding, use of fresh wholesome foods, plenty of pure fresh water and a well-balanced ration.

#### TETHERING AND USE OF A POKE

Goats have a tendency to range over a considerable area of land and are difficult to keep out of gardens or field crops unless tethered or unless a poke is put on each doe or kid.

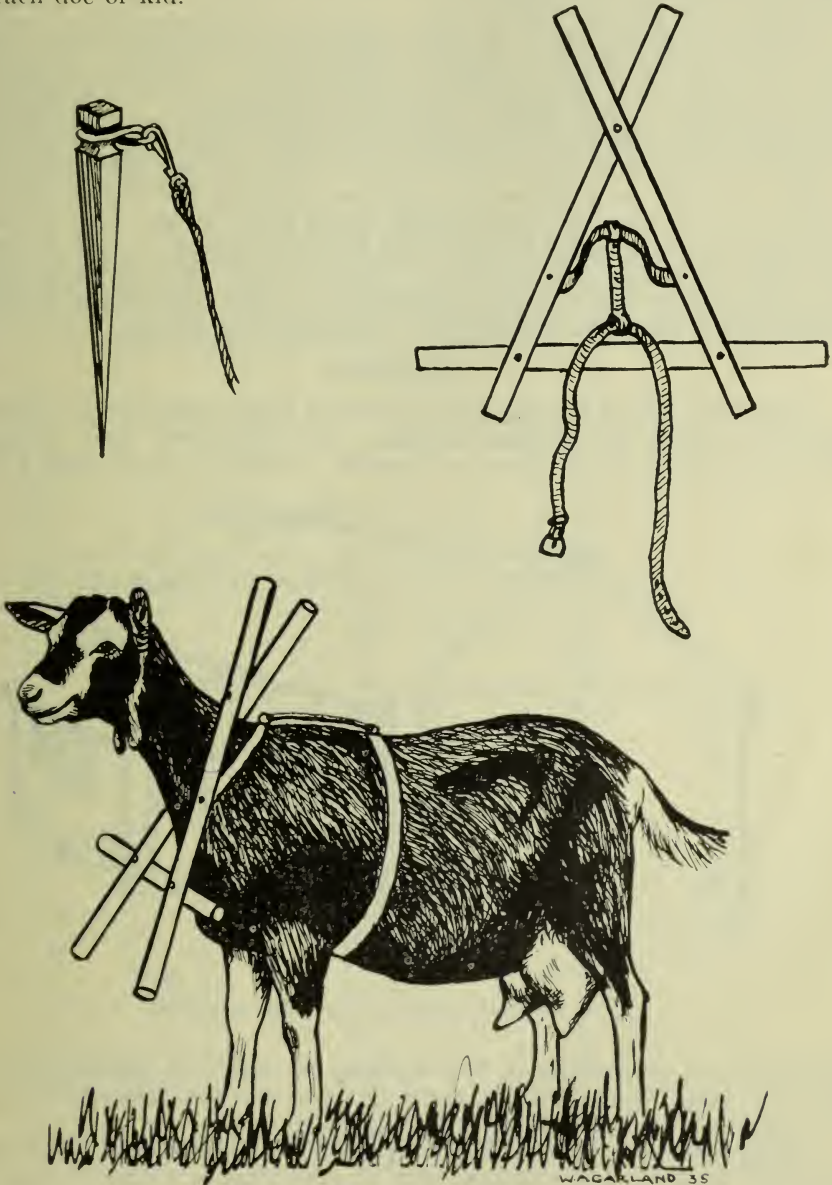


FIG. 6.—Tether pin and poke.

A tethering pin and chain or rope not less than 15 feet long are necessary if goats are to be confined to one spot. A tethering pin as in figure 6, which has a swivel at the end, is a very safe device provided it is well driven into the ground so that the rope or chain cannot wind around the peg. The poke is used to keep goats confined to paddocks or fields where the fences are none too good. Goats when tethered or confined to a paddock or field should have a regular supply of water.

### WINTER MANAGEMENT OF GOATS

Goats should always receive approximately the same care as dairy cows. They should be housed in wet cold weather. During the fall months they should be brought into the goat barn at night. As the weather gets colder they will be confined more and more until finally in winter weather they are only allowed out each day for exercise.

Clover or alfalfa hay is the best all-round roughage and goats should be fed what they will clean up readily twice daily. Cabbages, or roots in the form of turnips or mangels, are also relished and may be fed regularly all that will be cleaned up. Oats should constitute the main grain; 5 to 10 per cent oil-cake or 25 per cent bran may be added to the oats. Goats vary in their capacity for grain, consequently each goat should be fed what seems to be the amount of grain necessary to produce the maximum milk yield. If goats are thin in condition, a percentage of wheat may be mixed with the oats; however, as a rule, heavier and more fattening grains should be fed sparingly. Grain should be fed twice daily, morning and evening. Goats always like browsing and their craving in this connection may be satisfied if a few limbs from the bush are brought to the yard in which they are turned out for exercise.

### HOUSING

Those who intend keeping goats will have greater pleasure if the goats are housed in a clean well-planned building. For those who have an empty or partly used stable, the problem of expense is largely solved since all that is

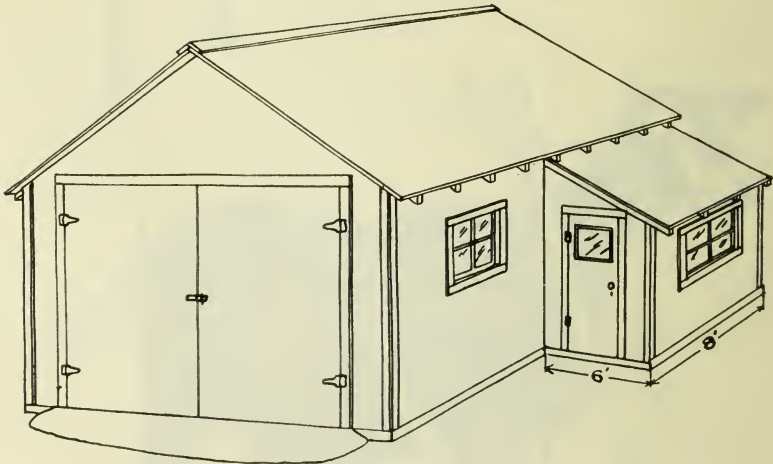


FIG. 7.—Small goat house attached to garage.

necessary is a remodelling of the building, so that it is suitable for housing goats. An empty horse stall can easily be fitted into two goat stalls that can be made sanitary and comfortable. (See figure 10.)

Where there are no buildings that can be remodelled, the following points will prove helpful. The cheapest form of a building is a lean-to, and as most people have a garage for a car the goat house may be built using one side of

the garage, preferably the east or west side, depending on prevailing winds and convenience. Such an arrangement, especially in the colder parts of Canada, will make for a warmer building. Most raisers will plan on keeping not more than two goats, one to provide winter milk and the other for summer milk. In such cases two stalls only will be required and a small building facing the south with a door and window for light will provide ample accommodation. If it can be arranged, space for storing hay and grain should be built in the garage. When it is the intention to raise the goat kids, a small box stall should be added. The building should be equipped with a suitable ventilating arrangement so that fresh air comes in and foul air escapes. The window should also be hinged and fitted so that it swings partly open, thus providing for greater ventilation in moderate or extremely warm weather. For the floor, concrete is the most satisfactory material, and the slope in the stalls and at the rear of the stall should be so arranged that the urine may run off and so that all manure may be easily removed. If the ground is damp under the goat house, be sure to overlay the soil with coarse gravel or cinders so that the cement floor when laid will be dry. This precaution will also tend to prevent heaving from the frost. The surface of the cement should be several inches above the level of the ground, thus providing against any possibility of surface water flooding the floor of the goat house.

### PLAN OF GOAT BARN

The plan of a goat barn will naturally to some extent depend on the number of goats kept. The plan figure (8) provides ample accommodation for five to eight does, with a box stall for kids, which may be used also for does while kidding. The stalls are arranged with a central feed alley which opens into the

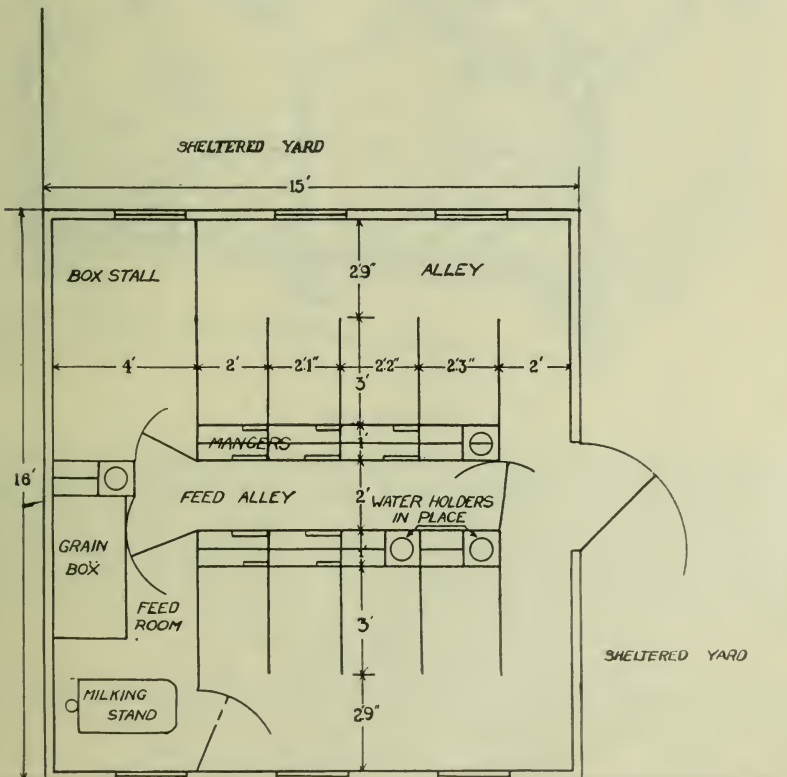


FIG. 8.--Plan of goat barn.



feed room. The plan provides for abundance of light and good ventilation. The arrangement centralizes labour and makes for the greatest possible degree of cleanliness.

Plan 8 shows plan of stalls, which vary in width to allow for arrangement of goats according to size. Stalls should be built in individual sections or in pairs so that they may be removed from time to time, thus permitting of stalls and floors being washed down and disinfected.

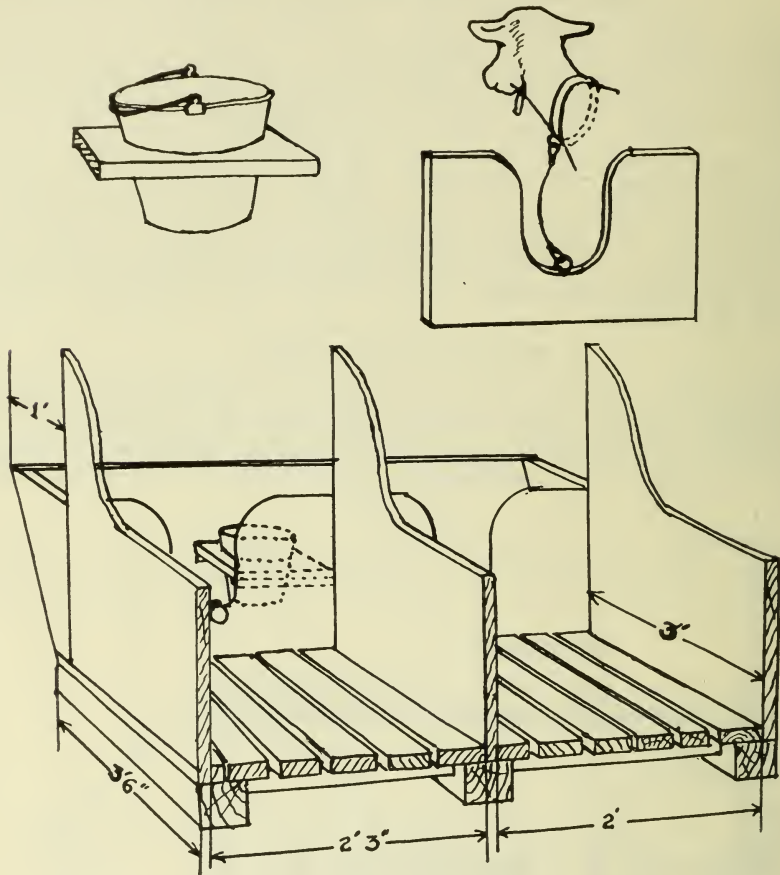


FIG. 9.—Plan of goat stall.

Each stall is equipped with a movable board for holding a watering pail or dish used for feeding grain. The board is made to fit at a convenient level. It slides easily into place and is removed when not in use. Figure 10 illustrates a simple method of tying which permits the rope to be left attached to the stall when goats are turned out, or if desired, the tie rope may be unfastened at the stall ring when the tie rope may serve as a leading rein.

#### BEDDING FOR GOAT HOUSE

Goats prefer hard dry clean floors at all times. Straw if fresh and dry may be used in cold weather, but care should be taken to make sure that any wet bedding is removed daily. In summertime goats prefer to rest on sleeping racks attached to the side of a building or even on the dry ground. In wet weather goats should always be provided with a clean dry place to sleep, in fact they should always be kept inside or be provided with shelter during wet weather.

## BREEDING

The period of pregnancy for goats is 147 to 152 days. The usual mating season is from September till March, although goats that are stall fed or goats on a heavy grain ration may have several periods of Oestrus during the summer months. Periods of Oestrus occur every three weeks. If the doe has to be taken some distance to the buck it is usually advisable to take her at the first sign of Oestrus and it may be advisable to leave her with the buck for a couple of days. As a rule mating on any date between September and March results in pregnancy provided the doe is healthy and the buck is a sure breeding animal. Doe kids should not be bred until they reach an age of eighteen months. Many goats are undersized chiefly due to breeding at too early an age.

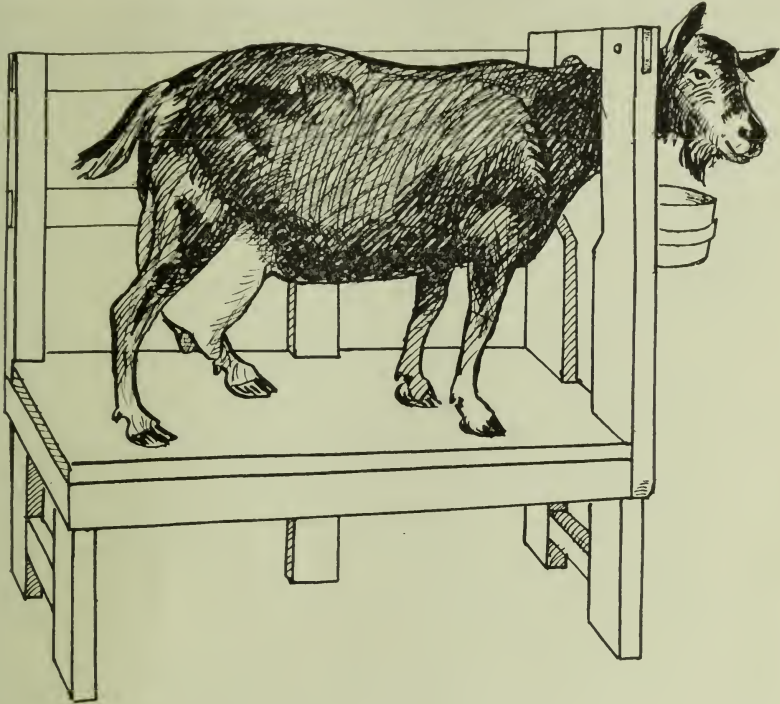


FIG. 10.—Milking stand.

## KIDDING

A few days before the doe is due to kid she should be moved to a box stall if possible making the accommodation comfortable in every respect. As soon as the doe has kidded she should be fed sparingly for a few days. The best of hay in the form of clover or alfalfa should be fed. No grain should be fed the first day. A light bran mash fed warm and lukewarm water will be sufficient. After 48 hours the grain ration may be gradually increased up to a full ration and abundance of succulent feed in the form of roots or cabbage may also be fed.

## REARING KIDS

As a general rule it does not pay to rear goat kids, certainly not the males unless they are from superior stock and there is likely to be a sale for breeding purposes.

The kids, generally two, are on their feet almost immediately after being born and if it is not desired to raise them on the doe they should be taken away and put in a box with straw till they dry off, after which the doe should be

milked and the kids fed out of a bottle or taught to drink out of a pan. In feeding kids by the bottle, the best plan is to use the Hygeia teat, or similar style, which fits over the usual milk-bottle. The hole in the teat should be enlarged by passing through it a piece of red-hot wire about the size of a fine knitting-needle. For the first week  $\frac{1}{4}$  pint should be fed four or five times daily; after this three times a day will do, gradually increasing the quantity. After the second or third week, oatmeal water or calf-meal and water, warmed, may take the place of part of the milk if the latter is required for household use. Kids soon begin to nibble at brush and hay, and after the third week should also have bran or shorts where they can get it without interference from older goats; they are usually weaned when 6 to 8 weeks old. If they have been allowed to run with their dam, it is difficult to wean them as goats become very much attached to their offspring and will allow them to suck until full-grown. Kids which are intended for breeding should be allowed milk as long as possible. If male kids are to be raised for meat, they should be castrated when 10 days to three weeks old.

### AILMENTS

Though goats are, on the whole, generally free from disease, they occasionally have their troubles, and the following table of diseases, symptoms, and treatment should prove useful:—

Ailment	Symptoms	Treatment
Colds . . . . .	Running at nose and eyes; shivering; staring coat	Warm housing; blanketing; warm gruel or bran-mashes. Give 2 tablespoons Epsom salts with 1 teaspoon ginger.
Bronchitis. . . . .	Similar to above, with quick breathing and dry cough, becoming looser until mucous is thrown up	As above; give inhalations of turpentine twice or thrice daily, by pouring turpentine over a little sawdust in bottom of a bucket, adding boiling water and holding goat's head in the steam, taking care to prevent scalding.
Constipation. . . . .	. . . . .	About an ounce of Epsom salts in a pint of warm water, and warm bran-mashes.
Chronic bloat . . . . .	Distention of abdomen. . .	Teaspoonful of powdered charcoal in feed daily.
Diarrhœa. . . . .	. . . . .	Administer purgative of castor oil, 4 ozs.; if diarrhœa continues, give $\frac{1}{4}$ oz. of prepared chalk in pint of warm water or milk every other day.
Dysentery. . . . .	Thin, slimy, offensive discharges; fever; no appetite; goat becomes weakened and emaciated	Administer castor oil and feed on good hay or gruel. Give chalk as above, and also 5 grains sulphate of iron twice daily in water.
Internal Inflammation. . . . .	. . . . .	(See veterinarian.)
Inflammation of udder. . . . .	Udder swollen, hot and painful to touch	Rub udder with carbolie oil; milk carefully and well; give 2 oz. Epsom salts every other day. Apply hot fomentations if udder hard, and dry thoroughly. If kid sucking, take it away and feed by hand.
Sore teats. . . . .	. . . . .	Wounds or scratches on udder or teats should be washed and dressed with carbolized vaseline.
Lumps in teats . . . . .	Due to a clot of milk, or sometimes matter	Soften with hot fomentation and work between fingers.
Leaky teats. . . . .	. . . . .	Hard to cure. Dip in alum-water and paint with collodion.





### IMPORTATION

Importation of animals into Canada is controlled by the Dominion Government and comes under the regulations of two departments namely, the Customs and the Health of Animals Branch of the Department of Agriculture. Goats registered as pure-breds are admitted free of duty, but on all other goats, whether they are registered as grades or as American pure-breds there is a duty payable of 25 per cent. The Canadian Government does not issue permits for the importation of goats from Europe because of the prevalence of foot-and-mouth disease on that continent. Permits may be obtained for the importation of goats from Great Britain since the acceptance of the London Quarantine Station. Importers must first make arrangements with the British Ministry of Agriculture and Fisheries for space in the London Quarantine Station, and then apply to the Minister of Agriculture in Canada for a permit.

Goats are detained in the London Quarantine Station at the importers' expense for a period of fourteen days. During that period they are under the supervision of the officials of the British Ministry, and when embarked for Canada are covered by their certificates. Upon arrival at the Canadian seaboard they are detained in quarantine for a period of two weeks at the expense of the importers.

Importations may be made from the United States, but here again regulations are enforced to prevent the entry of disease into Canada, and unless such regulations are properly complied with there will be considerable trouble and expense for importers.

Full information regarding importation will be given on application to the Health of Animals Branch, Department of Agriculture, Ottawa, and the Canadian National Live Stock Records, Ottawa.

### REGISTRATION

In Canada registration of the pedigrees of pure-bred goats is conducted by the Canadian Goat Society and the National Live Stock Records Board at Ottawa. In this registry are also recorded the foundation-stock class inspected by the Dominion Government Inspector in 1917 and the progeny of that class by pure-bred bucks.

This foundation-stock class was made for goats already in Canada, provided they passed inspection by a representative of the Dominion Live Stock Commissioner before the end of 1917, and was created to give breeders an opportunity of eventually breeding up to pure-bred stock from the many good goats already in the country which were not registered, but which were considered worthy of being registered for that purpose, either on account of their good milking qualities or of their suitability as breeding animals. The inspection was carried out by an officer of the Department of Agriculture at Ottawa, and resulted in about 200 goats being passed as worthy of registration as foundation stock. Foundation-stock goats are distinguished by the metal tag in their left ears, with the letters F. S. before the numbers and on their registration certificates. It should be distinctly understood that the foundation-stock class was limited to those animals inspected before the end of 1917, and that no other animals will be recorded in this class. Since 1923 all registered goats must be tattooed in both ears for identification. In the right ear are the breeder's letters and in the left a herd number and letters showing year of birth—A for 1923, B. for 1924, and so on.

Pure-bred goats in Canada are recorded under the Canadian National Live Stock Records. Rules and regulations for the record of performance for milk goats have been set up and each year a number of does qualify in the R.O.P. for goats.

The Canadian Goat Society, incorporated in 1917, has equal standing with other live stock associations in the Dominion and collaborates with the Canadian National Live Stock Records and the Federal Department of Agriculture in the matter of recognition of breeds of pure-bred goats, record books for goats, Record of Performance for milk goats and other matters of national importance to the goat industry.

Provincial and local goat associations interest themselves in such matters as prize lists for milk goats at fairs, goat shows and field days and other matters of importance to the goat industry of the province or the local district.

#### ACKNOWLEDGMENT

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