[*Green and Hahn*

Bucks must be securely fenced in a separate run.

whether naturally or by disbudding, is preferred, though this has no bearing on milk production. The muzzle should be full and well developed and the nostrils prominent. The adult goat has eight front teeth on the lower jaw which should meet the pad on the upper jaw. The teeth may be used as a guide to age. A kid under 1 year has eight small milk teeth; by about the fourteenth month the central pair of these will have been replaced by the large, adult teeth. Two more milk teeth are replaced during each of the third, fourth, and fifth years, so that a goat with a "full mouth" will be over 4 years old.

The neck should be long and slim, of good depth, and connect evenly with the withers and shoulders. Whether tassels are present is of no consequence.

To have milk-producing qualities a doe must have a well-developed body. She should be well grown and a height of at least 30in. at the withers is desirable. The so-called wedge shape of the dairy cow is clearly defined in a good milk doe. The wedge is seen both from the side view from the neck to the udder and from above from the neck and withers to the hip bones. Good depth of body and well-sprung ribs are important. Any marked dip behind the withers or shoulders or any undue thickness of the shoulders is undesirable. The back should be fairly level from the shoulders to the hips and then drop slightly to the tail.

The doe should stand well on her feet with no tendency to drop at the pastern or walk on the "heels". The legs should be clean, strong, and straight, and placed squarely under the body. The thighs need to be thin, leaving plenty of room for the udder.

The udder should be round or globular and carried well under the body, to which it should be attached over a large area. A pendulous udder or one that is "split" between the halves is not desirable. The udder must not be fleshy; just after being milked it should have a collapsed appearance and soft texture. The teats should be of moderate size and should point downward and slightly forward. They should be quite distinct from the udder; the type of udder of which it is difficult to say where the udder ends and the teats start is unsatisfactory.

The Buck

To make progress in breeding great care should be exercised in selecting the buck; good bucks like good bulls are scarce. Select a buck from a high-producing doe and a persistent milker. Nothing in breeding is more important than evidence that the entire family to which the sire belongs is especially good in performance and in conformation. Only a purebred buck should be used and once he has proved to be leaving good stock he should be used as long as possible.

The buck should be a vigorous type with strong masculine appearance and good conformation and breed character. Good depth of body is one of the most important considerations. Most breeders prefer bucks that are naturally hornless. However, hermaphrodism is associated with the hornless animal. The fact that horn growth has been prevented by disbudding should in no way detract from the value of a buck. Thinness is no objection if the buck is healthy and a good feeder. A buck is seldom in good flesh, especially during the breeding season.

Breeding

Age to breed: As a rule young does should not be bred until they are 15 to 18 months old. Thus doe kids born during spring should be bred the second autumn after birth. To obtain a milk supply during the entire year it would be necessary to breed for both autumn and spring kidding; in such cases young, well-grown does may be bred when 12 to 15 months of age. The goat if well nourished may reach sexual maturity at 4 to 5 months old. Early mating is not desirable and often results in stunted growth. Does have been known to kid when less than 9 months old.

Male kids are capable of giving service at 3 months. Young bucks may be put to service at from 6 to 10 months, but they should not be used to excess in their first season; a dozen services widely spaced is ample.

Mating: The natural breeding season is autumn. With mating extending from the end of February to the end of July kids would be born from July to December, but goats have been known to breed at any time of the year. Where goat dairies are operated breeding will be encouraged over as wide a season as possible to provide a continuity of milk supply. This, however, is one of the major difficulties of goat breeding.

There is a marked tendency for the milk yield to drop after the does have been in kid for some time. One method of maintaining a milk supply through winter is to withhold half the does from service each year; does not in kid can be milked right through. Though this involves the maintenance of virtually two herds, it may be considered worth while to keep up the milk supply throughout the year in a commercial dairy.

The gestation period for a goat is approximately 150 days, but it may extend from 140 to 156 days.

Oestrus or heat periods: Does come in heat regularly between March and August, after which only an occasional doe can be bred. The oestrus cycle is usually from 17 to 21 days, but a shorter cycle is not uncommon. Does may remain in season from 1 to 3 days, the shorter period being more common at the beginning or end of the season. It may be very difficult to detect oestrus in some does and they may then be allowed to run with the male for a time. The usual signs are restlessness, switching of the tail,

Standards for Judging Milking Goats

THE following allocation of points for the judging of a doe or buck will give some indication of the emphasis which should be placed on the various aspects of conformation:—

	Doe	Buck
General appearance, style and quality, temperament ..	16	20
Head	6	10
Neck	3	3
Forequarters	10	15
Body	13	15
Hindquarters	10	15
Legs	5	5
Udder and teats ..	30	0
Size and weight ..	5	5
Genital organs (bucks)		12
Polled (naturally) ..	2	0
	100	100

Twenty points should be deducted for horns on a buck, but it may well be considered that few, if any, points should be deducted where a buck's have been neatly disbudded.