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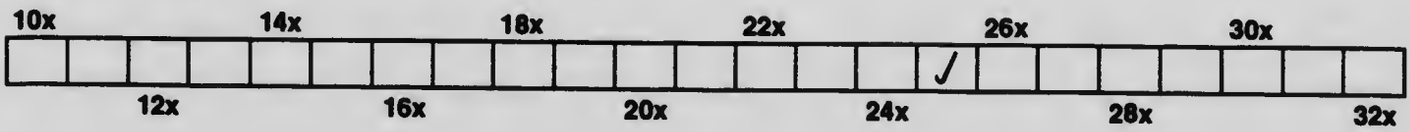

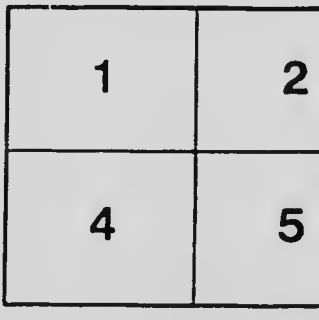

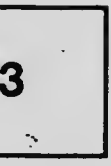

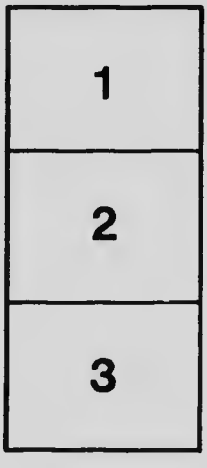

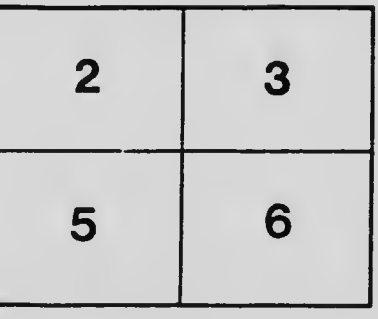

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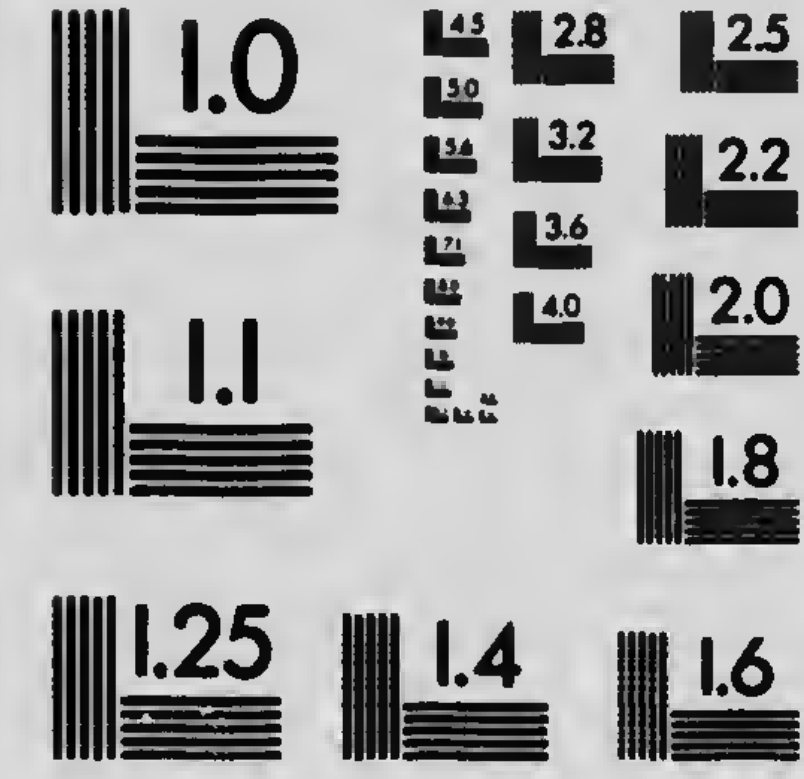

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DEPARTMENT OF AGRICULTURE
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Karakule Sheep

AND

Persian Lamb Fur Production

Karakule Ram.

PAMPHLET No. 15

SHEEP AND GOAT DIVISION

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DOMINION DEPARTMENT OF AGRICULTURE.
LIVE STOCK BRANCH.

H. S. ARKELL
Live Stock Commissioner.

T. REG. ARKELL,
Chief, Sheep and Goat Division.

PAMPHLET No. 15.
April, 1918.

KARAKULE SHEEP AND PERSIAN LAMB FUR PRODUCTION.

By G. Erle O'Brien.

In 1909 the first importation of Karakule sheep was brought into America, with the object of producing on this side of the water, what is known to the trade as Persian lamb, Broadtail and Astrakhan furs. This first importation consisted of fifteen head, ten ewes and five rams. Other importations to the United States followed in 1913 and 1914, with the result that during this time some fifty-four Karakules were imported, the majority of which were rams, the purpose being to mate these rams with the domestic white sheep. It was from these importations to the United States that the first Karakule sheep to arrive in Canada were obtained, when in the latter part of 1913 flocks were established in Nova Scotia and Prince Edward Island. The following year other importations were made and several flocks were established in Nova Scotia, New Brunswick and Alberta. At the present time there are between five and six hundred grade Karakules in Canada produced by crossing Karakule rams with our native long-wool breeds of sheep, and approximately one hundred rams and ewes either imported or descended from imported stock.

Persian lamb fur is the primary marketable product from Karakule sheep. Both in Canada and the United States there is a keen demand for this fur, which is being filled mostly from Asiatic countries ough the production of these same Karakule sheep. This Persian lamb is obtained killing the young Karakule lamb when only a few days old; at this age the skin i very black and tightly curled, while as the lamb becomes older the curl rapidly loosens. The qualities determining the value of a skin are lightness and size of curl, the lustre and size of the skin. Another grade of fur, the product of the Karakule, is Broadtail or Baby Lamb, the skin of prematurely born lambs, when these skins are strong and of good size they usually possess more lustre and a longer closer curl than do the other grades. Astrakhan fur is the dressed and dyed skins of young Karakule lambs which do not possess the regular tight curl, but rather loose and very open. Astrakhan is also frequently the result of late killing. These three classes of fur, Persian lamb, Broadtail, and Astrakhan, are invariably black when taken from the young Karakule: there is, however, a fourth grade which is usually included with the above by the fur trade, namely, Krimmer fur. This class is very similar to the Astrakhan. except that it is grey and is dressed in its natural state. It is said to be the product of the Karakule produced mainly in the Crimean Peninsula. So far as is known none of this class of fur has been produced by the Karakules in Canada.

The Origin of the Karakule.

The different authorities seem to be at variance regarding the origin of Karakule sheep; even those who have personally visited Bokhara, in Russian Turkestan, the native home of the Karakule. Like other domesticated animals their development has been spread over many centuries, the beginning of the breeding combinations, which made them what they are now, are simply not known. The natives of Bokhara apparently know absolutely nothing about their origin, while the Russian authorities

on sheep-breeding, some of whom have visited and studied the sheep in Bokhara, are of the opinion that there is no way of knowing how Karakules originated. It is said that the flocks of Karakule sheep in Bokhara present a motley picture of distinct groups of Karakule, Kirgis, Arabi, Shiraz and Afghan, with Karakule rams predominating. The name Arabi often used in connection with Karakule sheep comprises one of these groups, and it is probable that the foundation of the present fur-bearing sheep was the early native Arabi, in conjunction with the small black Danadar sheep, now almost extinct. The Karakule takes its name from Kara-kul (black lake) a village in the eastern part of the province of Bokhara, about which there are large flocks of these sheep. The area of Bokhara is about 85,000 square miles, and the number of sheep is estimated at from 3,000,000 to 4,000,000, while the average export of lambskins averages about 1,500,000. The skins are collected by dealers and traders and packed into bales for export and are sorted according to quality and uniformity by the dealers.

Karakule ewe and young lamb.

During recent years Persian lamb fur has become very popular, causing a steady advance in the price of the raw skins. In New York imported dyed skins of the first quality sell at from $12 to $20 each, while for the lower qualities prices range from 75 cents to $12. It is said that the average wholesale price of all skins sold at Nijni Novgorod, in Russia (the centre for the sale of Bokhara skins), in 1913 was $6.25.

The term Karakule applied to this breed is used in a general sense, since it has already been noted that there are a number of groups making up the breed in their native home, Bokhara. Those sheep, however, that have been brought into Canada together with their descendants conform very well to a distinct type, and may be described as follows: "They are medium size, with black face and legs. The wool at maturity is grey and very long and coarse. At birth the lambs are almost invariably black, with the tightly-curled fur, which is the desirable feature; as yearlings the wool is still black, but with brownish tint, the following year turning to shades of grey. The rams have large horns curving outwards, while the ewes are polled, although some

times the latter are also horned. The face is narrow, the eye full and bright, nose decidedly Roman, the ears small and pendulous, these last two features being very characteristic of the Karakule. The conformation of the Karakule does not serve well for mutton purposes, the back being narrow with flat sides and the rump drooping. The tail is the most distinctive characteristic, and is described as "broad-tailed" it being very broad next the body, perhaps eight to ten inches thick and about the same length, usually ending in a sharp curve.

In making selections it should be noted that fine wool in the fleece is very objectionable, while the hair on the face and legs should be glossy black.

Climatic Conditions.

The Karakule in its native home, Bokhara, must withstand extreme temperatures and very dry seasons, since the short winters there are very severe, while the summers are very warm with frequent sand storms. The grazing conditions of these sheep are also said to be rather unfavourable, as it is only in the spring of the year that the pastures are covered with green vegetation. At the expiration of this short period, lasting from the middle of March until May, the grass begins to dry up very quickly with only small patches of vegetation remaining here and there. The sheep get

Karakule lambs, born in Canada.

through the summer somehow and continue to work hard for their living during winter, since only in recent years have owners made any provision for winter feed. Of course there are often heavy losses of sheep due to the cold climatic condition winter and to the lack of sufficient food, but it must be concluded that naturally Karakule sheep is a very hardy animal able to withstand extreme temperatures and dry seasons. Further, the housing of sheep is not practised in Bokhara. In fact, with the customary migrations of the flocks when out in search of fresh pasture it would be almost impossible to provide any but natural shelters. For the successful raising of Karakule sheep it is necessary to pay considerable attention to the conditions under which for centuries they have been reared in other countries, and particularly is this true when changing from a dry to a wet climate. Already it has been stated that the climate of Bokhara is exceedingly dry and often the flocks must travel far in search of water. It should, however, be pointed out that the same water, the lack of which has turned a large area of the Khanite into a dead steppe, becomes fatal to the sheep when it is over abundant.

Having become accustomed through a series of generations to such a dry climate they react strongly when supplied with an abundance of water. It would appear that this would account for some of the difficulty which has been experienced with the flocks of Karakule sheep in Eastern Canada, and one which, when realized, should be very easy to overcome, in that dry pastures are obtainable and water may be given as seen fit. Naturally a change of food in itself also affects the condition of these sheep. The habitual feeding on the dry pastures in Asia also explains the fact that Karakules, when transported to other countries, will seek the highest and dryest places for feeding rather than damp or swampy land. They will, however, adapt themselves to a change of food rather quickly and readily, while with an abundance of moisture there is a tendency that the sheep will not thrive well.

One half-blood Karakule lamb from Karakule-Lincoln cross.

Attention in Other Countries.

During recent years much attention has been given by breeders in other countries to these fur-producing Karakule sheep and a fair number of sheep have, with much difficulty, been brought out of Bokhara, thus showing that it is generally believed that the production of Persian lamb fur is both profitable and possible in other lands besides Russian Turkestan. The industry is certainly profitable to the natives of Bokhara and it is claimed that the fear of outside competition in the world's markets for Persian lamb is the reason why such rigid restrictions are placed on the export of Karakules. Regardless, however, of these restrictions considerable numbers have been brought into other countries. It has been estimated that during the years 1907 to 1910 there were sent into Asiatic Russia 6,307 head, to Russia 1,673 head, to western countries 882, a total of 8,862 or on an average for each year of 1,577 head to Asiatic Russia, 418 to Russia and 221 to the west. Karakule flocks have also been established in Scotland, British South Africa, Canada, United States, Argentina, Germany, Austria and Hungary.

There is little information as yet on record pertaining to results obtained from the sheep in these countries, except that very satisfactory skins have been produced, not only from the Karakules themselves, but also from the crossing of Karakule rams

with British long-wooled sheep, such as the Lincoln, Cotswold, Leicester, and Highland Black Faced. Up to the present the work has been largely the nature of an experiment, in an endeavour to determine those breeds of sheep that will give best results when crossed with Karakules, to breed up standard flocks, running true to type, with the inherent character of producing fairly uniform Persian lamb.

Production and Value of Skins.

The first aim of the breeders of Karakule sheep in Canada is the successful production of first quality Persian lambskins, working towards this end by crossing Karakule rams with such breeds as the Lincoln, Cotswold and Leicester. It was at first thought that such crosses would produce some of the best lambskins, but it has since been proven that the more Karakule blood there is in the ram, the more value there is to the skin from a fur standpoint. However, by crossing the Karakule with our long-wool white sheep it may be possible in a few years to breed up ewes that will, when bred with Karakule rams, give birth to lambs, the skins of which are very satisfactory when placed on the market.

Persian Lamb produced from Karakule-Lincoln crosses.

In work carried on with Karakule sheep in Nova Scotia, Karakule rams were crossed with Lincoln, Cotswold and Leicester ewes, with the result that all the lambs were black and had, to a greater or less extent, the desired curl. The skins of the spring lambs that died at birth or a few days after, were removed and sent to a prominent Canadian fur-house for dyeing, and to have values affixed. These skins, according to the values placed upon them, ranged in price from 50 cents to $4.50. The following year twenty-six skins were sent to the same firm and values of these ranged from 75 cents to $6, or an average of about $4 each, wholesale. A valuable asset to the Karakule industry is that of being able to realize fair monetary returns from lambs lost at birth, since the skins can be removed and sold.

Skins produced by crossing with the three breeds Lincoln, Cotswold and Leicester, seemed to have little difference in the average qualities, which would go to show that any one of these breeds is as suitable as the other for crossing with the Karakule.

The second cross, between the half-blood Karakule ewes and Karakule rams produces a better quality and more valuable skin, and it is reasonable to expect that a flock of ewes well graded up with Karakule blood, will produce marketable skins. An American breeder, in 1914, had 225 half-blood ewes, the result of a first cross of Karakule rams with Lincoln ewes. Twenty skins from lambs of half and three-quarter Karakule blood were valued by a New York firm at an average of $4.25, one being valued at $7 and seven at $5. In 1915, twenty-three skins were taken from three-quarter blood lambs that died at birth or could not be reared. This lot averaged $3.25 each on the basis of the 1915 market, five of the lot being each worth $5 or over, and three below $2. Other skins produced from the second cross ranged in value from 50 cents to $10, averaging $4.70 each.

Crosses with ewes of the medium or fine-wooled breeds have produced unsatisfactory results. In experiments carried on in the United States, crossing Karakule rams on Merino and Shropshire ewes, inferior skins were produced, matted, lack of lustre, imperfect curl, and valueless from a fur standpoint.

Half-blood Karakule rams when crossed with the long-wooled breeds will not produce skins with any value for fur purposes, although the lambs nearly always will come black. The only way in which the half-blood Karakule ram could be used with any satisfaction towards fur production is in imparting Karakule blood to the flock where it is the ultimate intention to use full-blooded rams.

Removal and Treatment of Skins.

To obtain the best skins the young lambs must be killed at least before they are a week old. Only from experience can one know the best time to take the skin, for in some cases the curl will improve during the first two or three days while in others the skin is at its best shortly after birth. In prematurely-born lambs, the skin has a peculiar gloss and softness which does not, however, have a value above that of a good skin taken from the young lamb.

In removing the lamb's skin, a straight line should be cut down the belly and down the inside of the legs to meet the centre line. No part of the skin is cut off. Leave on the ears, nose, and tail to the tip, making no unnecessary cuts. The skin is then stretched evenly on a board with the fur side down, in a cool place, thoroughly dried and shipped without salting, care being taken not to crack the skin.

For Wool and Mutton.

The wool of the Karakule and its crosses varies in colour from light grey to black, dependent upon the age of the sheep, is long and coarse and would be classed as carpet wool. The fleece is naturally very dry and light in shrinkage.

The general conformation of the Karakule does not lend itself readily to mutton purposes although the texture of the mutton is very fine and of good flavour. The lambs are quick maturing and up to three months of age will average higher in weight than the mutton sheep; after that age, however, they do not seem to do so well and grow much less rapidly. As already pointed out, the first aim in raising Karakule sheep is the production of marketable fur, and under ordinary conditions of feed and management it would not be advisable to use Karakules in crossing with the mutton breeds for mutton purposes. On the range, or in parts subject to extreme temperatures and dry climates, the use of Karakule blood may prove of advantage in imparting hardiness to the mutton flocks. Where the mortality of lambs at birth is very high, the use of Karakule rams might be successful in that the skins of such lambs would be of some value especially after the first few crosses.

The Karakule industry in Canada as yet is only in the experimental stage. Mistakes have been made and doubtless will be made, but from results already obtained in the production of commercial fur there seems to be no good reason why Persian lamb and other classes of fur, the product of Karakule sheep, cannot be produced in this country.