

Manchuria's Golden Fleece

BY PHILIP KERBY

ONE fifth of the total number of sheep in the world, approximately 27,000,000 head, are found on the high fertile steppes of Western Manchuria and Inner Mongolia. This represents considerably more than one half of the total number of sheep in all China and Turkestan, and the buying and selling of sheep, the exportation of mutton and wool both to China and abroad forms one of the most lucrative industries of that large territory north of the Great Wall.

Sheep herding has always been carried on in a more or less desultory fashion by the wandering nomadic tribes of the north because sheepskins are the prime requisite of clothing both in summer and winter and in times gone by were utilized as one of the chief articles of barter. Even today in some localities a good strong wife may be bought for ten ewes and three rams, considered as the nucleus of a flock, or for thirty prime skins.

A great impetus was given to the sheep industry during the Great War because frozen mutton in large quantities was shipped to the fighting armies while sheepskins were used as a protection from cold in the trenches. Prices advanced at a rapid rate and for the first time Manchurian sheep appeared on the markets of the world.

It was only then that both Chinese and foreign firms took into consideration the potential buying power of foreign markets and efforts were made to bring the Manchurian sheep up to the standards maintained by other countries. Progress has only been gradual because both incentive and education were required to make the sheep herders realize the importance of proper cross breeding, different and better lambing methods to insure the survival of a larger of both ewes and lambs, as some attempt at standardization of wool.

In this connection great credit is due to the sheep experiment breeding farm at Kuchuling conducted under the auspices of the South Manchurian Railway. The director is a youthful Japanese who has made an intensive study of the best sheep raising methods in England and America and brings to his task limitless enthusiasm coupled with a wide vision for the future.

Some six weeks ago I spent a day on his farm and learned from him the splendid results accomplished during the three years he has been in charge of the station. Shortly after his appointment he realized that the only way to improve the breed of Manchurian sheep was through proper cross breeding and received permission to make a trip to America for the purpose of purchasing the best rams obtainable. He attended several of the most important cattle shows in the western states and returned to his farm in Central Manchuria with several champions, including southdowns merinos and shropshires.

Breeding Standards Being Improved

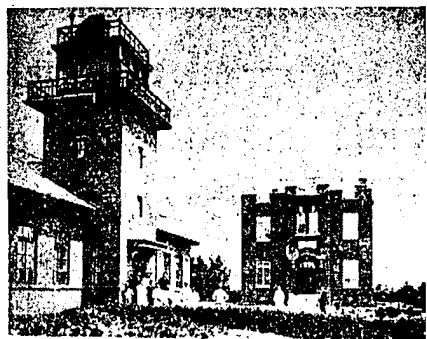
Experiments conducted during the past two years have completely proved the Mendellion Theory of Monohybridism, namely that the Manchurian sheep when crossed with the best breed never revert to type but partake of the best elements of the thoroughbreds. In order to assist the sheep herders to profit by these experiments graphic charts translated into Chinese and Mongolian have been prepared and are sent broadcast throughout the sheep country, and several assistants conduct lectures in many of the hsiens showing how the breed of sheep may be improved. In the next few years it is proposed to open several branch stud farms in order that the herdsmen may have their best ewes participate in the advantages. This service is entirely gratuitous and has already demonstrated its great efficiency in raising the standards.

The Western Manchurian and Mongolian sheep are for the most part short and fat tailed. They are comparatively light, a ram weighing from 75 to 100 lbs, and a ewe one-third lighter. The wool is fairly coarse, with comparatively little soft and stringy wool which makes shearing difficult. Through cross breeding, however, even the first generation shows a marked change for the better, while in the second generation nearly all of the stringy wool has disappeared, the fleece is long and soft and more than four times as abundant. Sheep are sheared twice, with the exception of lambs, usually

between May and June when the average yield is about 2 ½ lbs per animal, and again in August when the yield is between one quarter and one half pound.

These Manchurian sheep require practically no attention on the wide ranges and frequently one or two herders will take care of a flock numbering five thousand and more. They are assisted of course by fifteen or twenty dogs which are a species of wolf-collie and bear a strong resemblance to the Alaskan "huskies." The hardiness of these sheep and their ability to subsist on very scanty food during the winter and on their own fat accumulated during the summer together with their immunity from disease makes sheep raising a very profitable investment.

Hailar and Manchouli on the western section of the Chinese Eastern Railway are the great sheep centers of trade of Northern Manchuria. Hailar is the center of the great caravan routes to both inner and outer Mongolia as well as eastward to Blagoveschensk and southward to Tsitsihar. Manchouli is the terminus of the C. E. R. with the Trans-Siberian line and is one of the most important shipping points.



S. M. Ry Agricultural Experiment Station
Kungchuling

At the present time there are several important firms who have established branches at both Manchouli and Hailar for the purchase of sheep and wool, but these firms do not operate directly but through Chinese compradores.

Buying sheep in western Manchuria and Mongolia is carried on in the present day much the same as it was five hundred years ago. Payments for purchases are usually effected in silver slabs cut from the

original sycee, or from the silver bar. Silver is weighed on the old fashioned silver lever scale, the color of the lever having been previously agreed upon. There are three colored bars in daily use, white, black and brown. The white is known as the correct one, the brown showing over-weight and the black under weight. In doing business with each other foreign firms usually specify the white beam, receive payment from the Mongols by the brown, and pay it out by the black, thereby netting a profit of 10 to 12 per cent. In order to make the payments the silver bars or sycee are heated in the local blacksmiths forge and when red hot bits are chipped off with a coal chisel. When cool these fragments are weighed with the colored scale beam agreed upon and the transaction is completed.

This method which seems fairly rudimentary is only practised in the larger towns. On the wide ranges the payments are usually effected by a system of barter. Before the Russian Revolution when political conditions in Inner Mongolia were more normal than at present, black brick tea was the equivalent of silver. Its price was uniform. Now, its price fluctuates even more than the silver and the tribesmen are refusing to accept it except at a heavy discount. Other articles used in barter include a species of Chinese millet known as "Buda" and low grades of wheat or barley flour. Frying pans, tea kettles, mirrors and colored sweetmeats have a more or less definite value.

There is a story of one newly arrived and ambitious compradore who believed that better bargains could be driven with soap than with other more standard articles. He transported several cases of pink, green and yellow soap some hundred miles into the interior and began his bargaining. He was inordinately successful by promising the novelty but when the natives started devouring the pretty cubes despite his most frenzied explanations that they were to be used for washing purposes only—he departed hastily across the mountains leaving bag and baggage behind and pursued by the frothy imprecations of an outraged people. From that time soap has been barred as an article of barter.

There is no standard in bartering and compradores spend much time in driving their bargains. Sometimes in years of poor harvests half a bowl of poor quality Chinese millet will be worth one sheep while in times of plenty nine or ten bowls are required. The same applies to other articles as well since conditions vary widely in different localities.

Little Exportation of Sheep

Despite the large numbers of sheep, the exportation of wool is very small by comparison. It was not until four

years ago that any attempt was made to export wool in large quantities. Practically all the wool produced in Manchuria was consumed on the local market and the excess shipped into Chihli or Shantung. The difficulty was that there were no wool washing or baling plants until the Chinese Eastern Railway established both in the vicinity of Hailar.

At the present time shipments of wool are received at various stations along the C. E. R. including Manchouli and are



General View of Stock-breeding Section Agricultural
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routed to Hailar where the loosely packed bundles, weighing from one-third to half a ton, are picked, sorted and weighed and then washed by hand either at the railway plant or at one of the other plants established by private capital. In view of the fact that hand labor is so cheap in this section of the country it has been found more economical to use this method than to import expensive machinery from abroad thereby entailing also the employment of high priced operators. A special dike has been constructed across the Emigol river where the current is rapid and from this dike are suspended two woven wire cages. The laborers, squatting on their hams, wash the sorted wool in these cages, and rinse it in the swift stream by passing it one to the other against the current.

The wet wool is then either hung up to dry on long ropes or is spread across a wire screen constructed about eighteen inches above the ground to prevent mildew. The dry wool is again sorted and reclassified before it is sent to the hydraulic presses for bailing in quarter ton bales. Several Russians, who have travelled in Europe and America and know the requirements of the overseas markets, supervise both the washing and bailing at the C. E. R. plant which charges 30 yen a ton for washing and Y. 12.40 for bailing.

The wool that is washed and pressed in the C. E. R. plant may be sent in any direction except Russia without further disinfection. Russia demands that all wool crossing

the frontier be disinfected and therefore it was found necessary to erect a special plant to comply with this law. Wool sold for exportation to Russia after being washed and dried is passed through formaline steam under high pressure. An additional charge of 14 sen per pood (36 lbs.) is made for this service.

Where is this wool sold? With the exception of intremural China, America and Canada are the largest consumers, taking nearly 35,000 tons last year. Japan came next with England, France, and Germany in the order named. Figures are not available for the amount shipped into Russia but it is a well-known fact since the revival of the N. E. P. in Moscow shipments have nearly trebled.

During the past year the price for washed wool averaged between eight and nine cents gold per pound at Hailar and at the close of the season went to nine and one-half cents. This of course is a remarkably low price, but after paying various export duties and transportation charges which amount to between \$76.41 and \$89.32 gold per ton, before a ton of wool arrives in Shanghai ready for shipment abroad, it will be seen that the price must necessarily be low in order for the purchaser to realize any profit at all.

Until foreign banks give some aid in the matter of credits by assisting in both the purchasing and the financing of transportation of both wool and mutton shipments, the present rather "hit or miss" system must continue. The banks argue quite rightly that the market fluctuates considerably and they are unable to obtain any tangible security for purchases. The sheep are owned largely by native tribes loosely joined together in leagues which due to the nature of their nomadic existence are unable to give any definite assurance of time of delivery or grade of wool. A banker demands something more than the headman's word that he will have his people deliver a definite number of sheep on or about a certain date six to eight months later.

The ratio between the actual cost of the wool and its shipment appears quite out of proportion and until an adjustment of the carrying charges is made the sheep raising industry cannot assume its proper role in world markets.