

ESTONIAN WHITEHEADED (Estonskaya belogolovaya)

This breed was developed in Estonia by crossing local white-faced coarsewooled ewes with English Leicester and later with Cheviot rams, until crosses of the desired type were obtained, i.e. with uniform semifine wool, good meat traits and suited to the local conditions.

The development of the Estonian Whiteheaded breed was largely due to economic factors. Farmers of the Baltic region raised mainly semicoarsewooled sheep obtained by mating coarsewooled ewes to rams of various semifinewooled breeds. At the beginning of the 20th century the demand for mutton sharply increased and the demand for home-grown wool drastically fell since large quantities of better and cheaper wool were imported from Britain. Home-grown wool was used mainly for knitting and rug-making which required uniform semifine wool. Therefore, local sheep had to be upgraded. In order to improve local breeds, the Leicester and Cheviot were imported from Britain and Sweden. The Cheviot breed played

the decisive role in producing the stock of white-faced sheep. Systematic breeding of these sheep began in 1940 and was successfully continued after the Second World War. Selection and rigid culling produced a large stock of white-faced sheep which were bred pure.

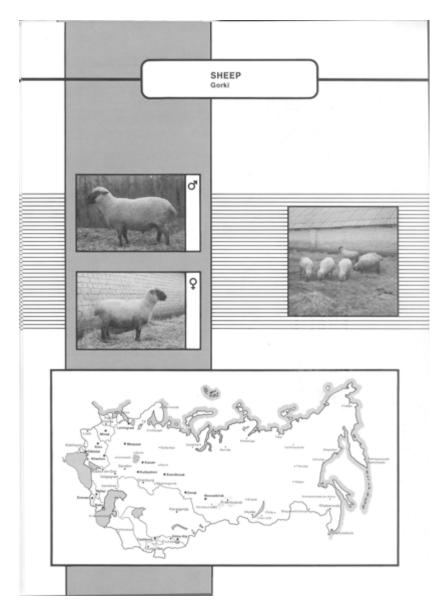
At present Estonian Whiteheaded sheep are zoned for raising in five districts of southern Estonia.

The number of sheep of this breed declined from 8112 in 1964 to 1529 (all purebred) in 1980. This figure included 92 breeding rams, 15 other rams and 1152 ewes and yearlings.

In appearance Estonian Whiteheaded sheep resemble the Cheviot. The head is of medium size, the forehead broad, the nose short, often Roman. The head is covered with lustrous hair. Both sexes are hornless. The neck is short, thick and muscular. The chest is deep and wide. The withers are high and well covered. The body is broad, deep, and somewhat elongated. The back and loin are long; the rump is wide and somewhat sloping. The tail is long, and thighs are well covered. The front legs are strong, short, and correctly set. The forelegs are covered with white wool down to the knees and the hindlegs down to the hocks.

The average live weight of rams is 68 kg (range 50-80 kg) and that of ewes is 43 kg (range 35-70 kg). The weaning weight of lambs is 26-28 kg. The annual fleece weight is 3.6-3.8 kg for rams and 2.5-2.6 kg for ewes. The fleece has a tippy staple; yolk is white or light cream. Staple length is 10-12 cm; the wool is 48s-50s quality. Clean wool yield is 50-55%. The wool is elastic and lustrous; these traits are particularly valued in knitted goods. Lambing rate is 120-130 lambs dropped per hundred ewes lambing. Sheep of this breed combine uniform semifine wool of high quality with early maturity and good meat traits. They are suited to the damp climate of Estonia. At the same time they can be used on a wide scale in some regions of the Russian Federation for commercial crossbreeding to produce lambs for sale in their first year.

The State Flockbook lists 263 sheep, including 30 rams.



GORKI (Gorkovskaya)

This breed was developed in Gorki region between 1936 and 1950 by crossing coarsewooled Northern Short-tailed ewes with Hampshire rams imported from England. Local sheep had a low productivity - live weight was 24-40 kg and the wool clip was 1-1.6 kg. Meat conformation was poor. At the same time the sheep were active and fertile. In order to improve meat and wool traits, Hampshire rams were imported in 1936. Their average live weight was 85 kg; fleece weight was 3.96 kg; the wool was of 56s quality; staple length was 6-9 cm and clean wool yield was 45-56%. The imported rams, however, did not thrive in the severe conditions of the Gorki region. Fleece weight declined and most of the rams died in 2 or 3 years. Crossbreeding revealed that crosses of Hampshire rams had sufficiently high production and were well adapted to the environmental conditions. Therefore two crosses of Hampshire rams on the local sheep were made.

The next stage was selection of crosses of the desired type and their breeding inter se.

In conformation the Gorki sheep are similar to the Hampshire. They have a deep, barrel-shaped body on short legs; the chest is deep and wide; the back, loin and rump are level and wide. The head is broad and the neck is short and thick. Both rams and ewes are hornless. The hair on the head, ears and legs is dark in colour.

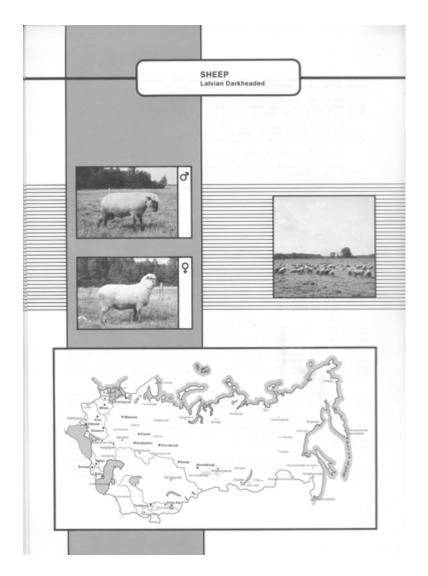
The wool is uniform, of 50s-58s quality, 7.5-8.5 cm long. The fleece has a blocky staple; it is uniform in fineness. Fleece weight is low, 3.0-3.7 kg for ewes and 4.0-4.5 kg for rams. The clean wool yield is 55-65%.

Live weight of rams is 110-120 kg and that of ewes 59-67 kg. These sheep are well known for their early maturity and good food conversion. During a 4-month period young wethers consumed 4.2 fodder units to gain 173 g daily. The carcass weight was 22.6 kg, the slaughter yield 51.8% and the meat content of the carcass 85.4%.

The numbers of Gorki sheep have remained steady over the last fifteen years but the proportion of purebreds has increased. In 1980 the total number was 59 619 (89% purebreds) including 836 breeding rams, 142 other rams and 39 240 ewes and yearlings.

The best flocks of breeding sheep are on Kamenski and Khvoshchevski state farms, on Mir and Krasny Partizan collective farms and on Shcherbinki training farm, in Gorki region. There are 7 lines and 30 families.

On 1 January 1980 the State Flockbook listed 410 licensed ewes of the Gorki breed.



<u>LATVIAN DARKHEADED</u> (Latviiskaya temnogolovaya)

This breed was created between 1920 and 1940 in the Latvian SSR. Crosses of finewooled, semifinewooled, and coarsewooled ewes were mated to Shropshire and Oxford rams until animals were obtained which had uniform semifine wool and good meat traits, and were suited to local conditions.

Sheep of the desired type have a strong constitution and fine bone. Both rams and ewes are polled. The head is short and broad, the neck short and thick. The shoulders, back and loin are broad; the chest is wide and full. The legs are straight, wide apart. The head, ears and legs are covered with dark hair.

The wool is uniform; it is white on the body, but some sheep have coloured fibres. It is predominantly of 50s-56s quality. Wool length is 9.0-9.5 cm. The average wool production is 5.2-5.9 kg for rams and 3.2-3.6 kg for ewes. The clean wool yield is 55-57%.

The live weight of rams on the leading farms is 100-115 kg and that of ewes is 62-76 kg. Sheep of this breed exhibit early maturity and rapid weight

gains; the average daily gain of lambs up to weaning is 210-240 g. The slaughter yield of adult sheep is 55-57% of the live weight; the finished live weight of lambs is 35-37 kg and the slaughter yield is 50-52%. The yield of first-grade meat is 72-75%. According to data from a progeny test station, one kilogram of weight gain in young animals of 9 to 12.5 months of age requires 5.4-6.8 fodder units.

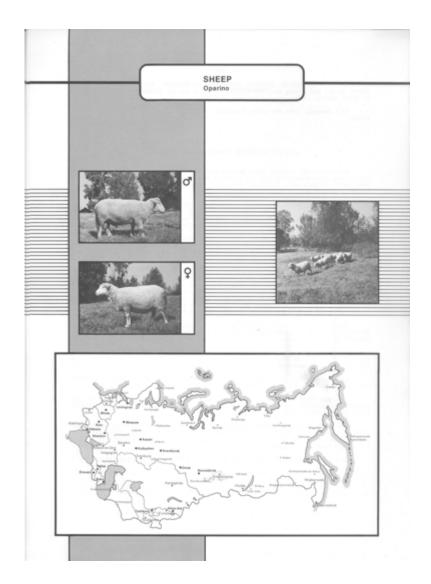
Lambing rate is 120-130 lambs dropped per hundred ewes lambing. In individual flocks it is 160-170 lambs dropped and 150-160 weaned. The average milk yield is 120-130 kg per lactation; this is enough to feed twins. The number of Latvian sheep has more than doubled since 1964. In 1980 there were 385 632 (65% purebreds) including 9079 breeding rams, 7264 other rams and 232 973 ewes and yearlings.

Sheep of the Latvian breed are raised in the Latvian SSR, in Pskov, Novgorod and Kaliningrad regions of the RSFSR and in the Byelorussian and Ukrainian SSRs.

The best flocks of this breed are raised on Vetsautse training farm of the Latvian Agricultural Academy, on Yaunais Rits collective farm, on Eleya and Vietalva state farms, and on Saulaine training state farm.

There are 18 strains within the breed, 12 of which come from the Oxford and Shropshire. Sheep of Minka 14's family have a particularly high productivity: the average live weight of adult sheep of this family is 87 kg; fleece weight is 5.3 kg, and staple length is 9.4 cm.

On 1 January 1980 the State Flockbook listed 2530 ewes, including 120 sires.



OPARINO (Oparinskie ovtsi)

The Oparino sheep were developed in Oparino district of Kirov region. They are only of local significance, few in number and raised exclusively on private plots in the upper reaches of the Moloma and Kirchug rivers in Kirov region. The emergence of these sheep is associated with the migration of the Letts and Estonians who come to the Oparino district from the Baltic area between 1908 and 1915 and brought with them finewooled and semifinewooled sheep (of the Merino and Lincoln breeds according to M.F. Ivanov). Later they were mated to local Northern Short-tailed sheep. Selection and rigid culling resulted in the emergence of a special mutton and wool type designated by the name Oparino.

The number of Oparino sheep has remained fairly steady since 1964. In 1980 there were 8164 (97% purebreds) including 80 breeding rams, 31 other rams and 5550 ewes and yearlings.

Oparino sheep have thin tails usually reaching to the hocks. The conformation is good. Rams are horned. Ewes are predominantly hornless. The head profile is straight. The neck is of medium length, smoothly joined

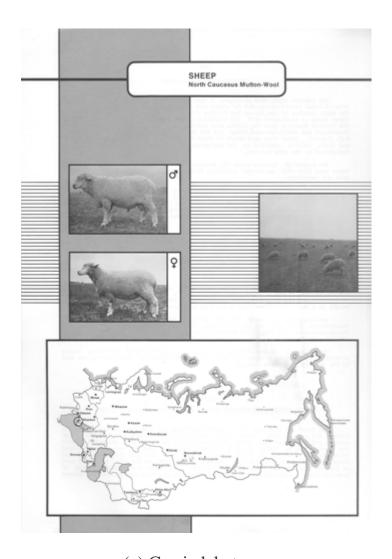
with the shoulders. The chest is sufficiently deep, the back relatively broad and level, the body of medium size, the legs relatively short. The brisket is well developed and prominent. The thighs are full.

The average live weight of adult ewes is 45-50 kg and that of rams is 80-90 kg. Lambs at weaning weigh 18-21 kg. Withers height of adult sheep is 62 cm, oblique body length 66 cm, width of thighs 18 cm, chest depth 29 cm, and chest width 18 cm.

Sheep are predominantly white in colour. However, there are some whose head, legs or neck are greyish brown, chestnut, black or grey. Fleece covering is satisfactory.

The wool is uniform, semifine, of 50s-56s quality. In crimp the wool is similar to that of the Lincoln. The outer staple is close, rarely tippy. The length of one-year wool is 8.5-14 cm. The fleece has no kemp or coarse wool. Annual fleece weight is 2.0-3.5 kg for ewes and 3.5-5.0 kg for rams. Clean wool yield is 60-65%

Oparino sheep are hardy and well adapted to damp forest areas. They are resistant to foot rot in the conditions of excessive humidity. Survival and fecundity are satisfactory. The average number of lambs dropped per hundred ewes is 130-160. Mortality to weaning does not exceed 6%. The existence of the Oparino confirms the possibility of obtaining highly productive local sheep with uniform wool and raising sheep for their mutton and wool in the country's northern regions:



(c) <u>Corriedale type</u> <u>NORTH CAUCASUS MUTTON-WOOL</u> (Severo- Kavkazskaya myaso-sherstnaya)

The breed was produced in Stavropol territory by crossing finewool ewes with Lincoln and Romney rams. Sheep of the desired type were selected from the first crosses and bred inter se. Until 1951 breeding and selection were performed within two types, A and B. Sheep of the A type were by Romney rams and were characterized by relatively fine wool of 58s-60s quality. The wool was only slightly waved and dense, with a length of 8.5-9.5 cm. Sheep of the B type, on the other hand, had wool of 50s-56s quality, with a length of 10-11 cm. The lustre fleece was curly and of lower density. Research at the Moscow factory for primary wool processing showed that the wool of B-type sheep had better technological characteristics. Therefore, the breeding of A-type sheep stopped in 1952 and since than selection has been carried out only with regard to sheep of the B type, with the aim of improving their traits and increasing their numbers. Sheep of the desired type have a strong constitution and are large in size: withers height is 75.6 cm in rams and 70.2 cm in ewes. Meat characters are

well developed: the back and loin are wide; the chest is deep and wide and moderately prominent; the thighs are full. The head is broad and relatively short; the neck is thick and short. The legs are of medium length and strong. The set of the legs is correct. Both rams and ewes are predominantly polled.

The fleece has a tippy staple and is of medium density. The wool is white, and uniform in fineness both within the staple and over the body. Staple length is 12-13 cm; the wool is of 50s-56s quality, curly. The crimp is distinct along the whole staple length. Fleece weight of rams is 9.12 kg and that of ewes is 5.5-6.0 kg, with a clean wool yield of 55-58%.

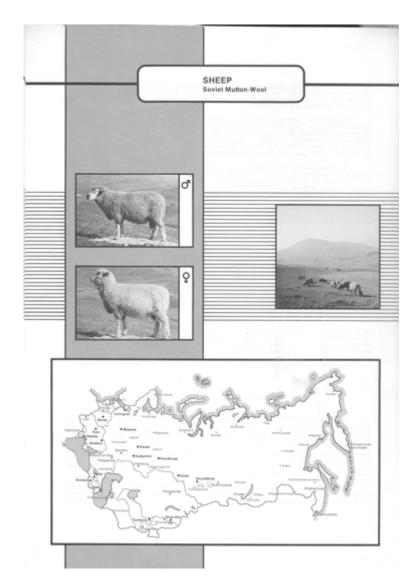
Live weight of rams is 90-100 kg and that of ewes 55-58 kg. Forty-five well-fed yearling ewes had an average live weight of 70.1 kg and forty yearling rams 85.1 kg. The maximum live weight of yearling ewes is 85 kg and that of yearling rams is 119 kg. The average live weight of adult rams is 150 and that of ewes 129 kg. Sheep of this breed are known for their good carcass traits. For example, young wethers which were range fattened on Sudan grass from June to September and also received concentrates, averaged 200 g daily weight gain. Their carcass weight at the age of 8 months was 21.4 kg; the carcass yield was 50.1%, and the meat content of the carcass 78-79%. Lambing rate is 120-130 lambs dropped per hundred ewes lambing.

The number of sheep of the North Caucasus Mutton-Wool breed has increased four-fold over the last 15 years. In 1980 there were 1 782 847 (21% purebreds) including 37 402 breeding rams, 25 116 other rams and 1 112 902 ewes and yearlings.

Sheep of the North Caucasus breed are raised in the North Caucasus and in Ukraine and Armenia.

The best flocks are at Vostok breeding centre in Stavropol territory and on Malo-Kabardinski breeding state farm in the Kabardino-Balkar ASSR. These flocks have three lines. Each line has its special traits: one is characterized by heavy fleece weight and satisfactory live weight, another by large size and satisfactory fleece weight and the third by early maturity.

On January 1, 1980 the State Flockbook listed 1100 sheep, including 90 sires.



<u>SOVIET MUTTON-WOOL</u> (Sovetskaya myaso-sherstnaya)

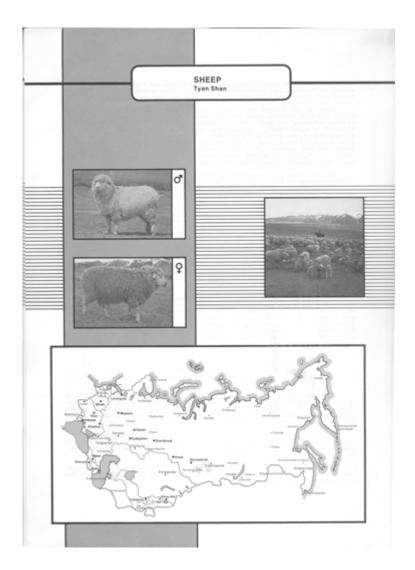
This breed was produced (as the Mountain Corriedale breed group) in mountain and foothill areas of North Caucasus during 1950-85. In January 1986 it was officially recognized as the Soviet Mutton-Wool breed. This area is characterized by a high level of humidity, continental climate and rough terrain. On most farms sheep are kept on a transhumance system. Until 1936 mainly coarsewooled sheep of the locakachai breed were kept there. Sheep of this breed are strong and well adapted to the difficult conditions of transhumance. However, their productivity is low: live weight is 32-38 kg and fleece weight (in two shearings) is 1.0-1.2 kg. Since 1936 local sheep were unsuccessfully mated to rams of finewooled breeds. An expedition was sent to check the quality of the crossbreds, and in 1950 work began towards obtaining a breed of the meat and wool type. To achieve this goal crossbred finewooled ewes of varying quality were mated to rams of the North Caucasus Sheep of the desired type have a strong

constitution and a well-developed frame. The body is barrel-like, with well-

pronounced meat conformation. The breast is broad and deep; the back, saddle and sacrum are straight and broad. The head is broad and relatively short. Rams and ewes are predominantly hornless. The head is covered with fleece down to the eye-line. The face is covered with white hair; small dark spots are allowed on the nose and ears. The legs are strong, of medium length, and well placed. The hoofs are strong, dark-coloured or spotted, sometimes white. The forelegs are covered with fleece up to the knee, and hindlegs up to the hock. Dark spots are allowed close to the hoof. The fleece has a tippy staple; it is of medium density. The wool is white, of uniform fineness of 50-66s quality, with large, well-pronounced waves along the entire length of the staple. The belly covering is good or satisfactory. The fleece weight of rams is 7-9 kg and that of ewes is 3.5-4.0 kg; the clean wool yield is 60-65%.

The live weight of rams is 90-100 kg and that of ewes is 50-55 kg. The Soviet Mutton-Wool has vast potentialities. 300 well-fed ewes had an average live weight of 48.7 kg at the age of 12 months and 54.7 kg at the age of 18 months; the fleece weight was 6.15 kg, with 3.7 kg of clean wool. Sheep have good slaughter qualities. The live weight of 8-8.5-month-old lambs after feeding was 18.4 kg, the dressing yield was 49.2%, and the meat yield of the carcass 81.7%.

There were 610 000 head of Mountain Corriedale sheep at 1 January 1980. The best flocks are on the breeding centres of Znamya Kommunizma, Oktyabr, 22nd CPSU Congress, and Lenin collective farms in the Karachaevo-Cherkess Autonomous Region and of the Rossia and Engels collective farms, and Spokoinenski state farm in Krasnodar territory. There are seven lines, each with special traits of its own. Line 1053 is characterized by early maturity; line 9596 by a heavy fleece weight; line 2024 by a well-pronounced crimp; line 463 by large size and good fleece weight; line 3 by a good conformation and closed fleece, dense wool and white yolk; line 07482 by quality wool (uniformity, even and pronounced crimp, white yolk). The line of ram 6950, which comes from Australian Corriedales, is characterized by higher wool quality, white yolk, and a well-pronounced crimp along the entire length of the staple.



TYAN SHAN (Tyanshanskaya)

This breed was produced at the Tyan Shan Livestock Breeding Experiment Station in the central Tyan Shan mountains at an altitude of 2700-3000 m. In the Kara Kujer valley, where the sheep farms of the station are located, the climate is sharply continental, the average annual temperature is -1 C, and the rainfall, which occurs cheifly in summer, varies from 300 to 350 mm per annum.

The Tyan Shan breed was obtained by mating Précoce x fat-rumped crossbreds with semicoarse and semifine wool to Lincoln rams imported in 1950. When the first generation of crossbreds was obtained, animals of the desired type were bred inter se. The breed was recognized in 1966. Sheep of this breed have a strong constitution and well-pronounced meat conformation. Both rams and ewes are hornless. The chest is broad and deep. The back, saddle and sacrum are broad and even.

The wool is white, uniform within the staple, of 56-50s quality, and even over the body. The staple length is 12-13 cm; the fleece has a tippy staple.

The fleece weight of rams is 8.5-9.0 kg, and that of ewes 4-4.5 kg; the clean wool yield is 68-70%.

The live weight of rams is 100-110 kg (max. 150 kg) and that of ewes is 55-60 kg (max. 100 kg). Sheep of the Tyan Shan breed are early maturing. When adequately fed, 4-month-old lambs reach a live weight of 30-32 kg; at 7-8 months they weigh 40-43 kg and at 13 months 50-52 kg. The meat yield in lambs is 48%, and the ratio of meat to bone is 4:1.

The fertility rate of ewes is low, 110-115 lambs dropped per 100 ewes lambing. The milk yield is good: in 125 days of lactation ewes produce up to 125 kg of milk which is enough for proper development of the young. The number of sheep of the Tyan Shan breed has increased rapidly since 1964. In 1980 they numbered 447 302 (29% purebred) including 1901 breeding rams, 6610 other rams and 326 138 ewes and yearlings. According to the breed zoning plan sheep of the Tyan Shan breed are raised in Tyan Shan, Ak-Talin and Toguz-Torou districts of Naryn region of the Kirgiz SSR. The best flock is kept at the Tyan Shan Livestock Breeding Experiment Station: there are some 50 000 head and the average clean fleece weight is 2.6-2.8 kg. Sheep of this flock are purebred and linebreeding is employed.

The National Herdbook lists 165 sheep, including 12 rams.