

KARACHAI (Karachaevskaya)

According to the breed regionalization plan, the Karachai breed is raised in the Karachaevo-Cherkess Autonomous Region, Kabardino-Balkar ASSR and North Ossetian ASSR. Therefore, sheep of this breed are sometimes called Kabarda or Ossetian.

The area where sheep of this breed are raised is characterized by a very rough terrain, high humidity and sharp temperature fluctuations during the day. In these conditions the Karachai effectively subsist on alpine and sub-alpine ranges at altitudes up to 3500 m above sea level.

Sheep have a sound frame, deep chest, and well-developed legs with tough hoofs; therefore they can easily traverse the rough mountain terrain. The tail is some 44 cm long in rams and some 40 cm in ewes; it is broad, rounded or V-shaped at the root and S-shaped at the tip. When grazing, sheep carry 4-5 kg of fat in the tail. The head is small, narrow and Roman-nosed. Both rams and ewes are horned.

Sheep are predominantly black (up to 80%); grey, red and white are also seen. Most black sheep have a white spot on the poll and a white tail tip.

The wool is coarse and hangs in pointed locks. According to Mukhin (1965), the wool contains 66.6% of true wool fibres, 11.9% of intermediate fibres and 21.5% of guard hair. It is of better quality than the wool of other coarsewooled Caucasian breeds. Ivanov wrote in this respect: "Although the wool of Karachai sheep is not fine, it does not contain the very coarse hairs which are often present in the fleece of other Caucasian breeds. The ability to form thick felt makes the wool of Karachai sheep suitable for making such items as felt boots and its clear black colour in young sheep renders the items made from it very beautiful in appearance." Karachai sheep produce light and durable sheepskins with thick skin.

There are three types of Karachai sheep: a triple-purpose type producing mutton, wool and milk, and types tending either toward wool or towards mutton production. The average annual fleece weight is 1.6-3.1 kg in rams and 0.8-2.6 kg in ewes.

Karachai sheep are small in size. The average live weight of rams is 60 kg (max. 90 kg) and that of ewes is 45 kg (max. 70 kg). Sheep mature sufficiently early; by the age of three months lambs reach 38-40% of the live weight of adults (Table 4.7). When fed and managed properly, the 6-month-old rams weigh more than 50 kg. The carcass yield after grazing is 47-56%. Most fat is deposited on the loin and rump. The mutton and fat of Karachai sheep are very palatable.

Table 4.7 WEIGHT FOR AGE OF KARACHAI SHEEP

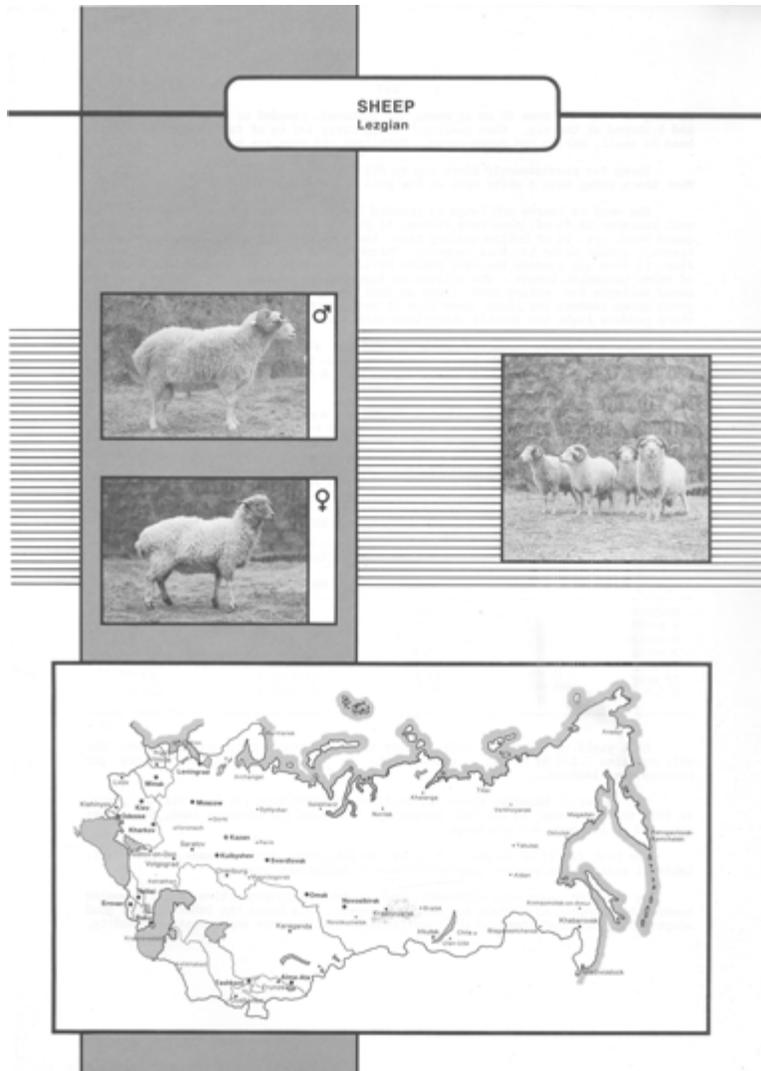
Age	Live weight (kg)		Percentage of live weight of adult
	Average	Range	
Newborn	3.6	2.9- 4.5	7.9
3 months	18.9	13.5-22.0	41.5
6 months	27.5	21.0-32.0	60.4
9 months	31.4	24.0-35.0	69.0
12 months	30.8	23.0-36.0	67.7
18 months	39.8	34.0-43.5	87.5
4.5-5.5 years	45.0	36.0-55.0	100.0

Milk yield is relatively high - 56-85 kg of marketable milk per lactation. The milk contains 7.2-9.6% of fat. Lambing rate is low - 105-110 lambs dropped per hundred ewes lambing.

The number of Karachai sheep has declined somewhat over the last fifteen years. In 1980 the total was 55 028 (94% purebreds) including 943 breeding rams, 646 other rams and 42 198 ewes and yearlings.

The best flocks of Karachai sheep are on Eltarkach, Osman Kasaev, Teberdinski, Labinski state farms in the Karachaevo-Cherkess Autonomous Region.

By crossing ewes with finewool rams a new highly-productive semifinewooled breed, the Mountain Corriedale has been developed. This breed has inherited the good adaptability of local sheep to the conditions of transhumance and excessive humidity.



LEZGIAN (Lezginskaya)

Lezgian sheep belong to the group of Caucasian fat-tailed breeds. They originated in the Dagestan ASSR and were described for the first time in 1912 when they were exhibited at the All-Russia Sheepbreeding Exhibition. Lezgian sheep are also raised in some districts of Azerbaijan on the border with Dagestan. This area is characterized by a mountainous relief and a great variety of climatic, soil and feeding conditions. Sheep are usually kept on a transhumance system in order to utilize the grasslands of both mountain and plains.

The number of sheep of this breed has increased over 20 times since 1964. The total in 1980 was 237 774 (32% purebreds) including 5344 breeding rams, 14 501 other rams and 134 809 ewes and yearlings.

Lezgian sheep have a strong constitution and are good walkers. Their conformation is typical of mountain sheep. They have an ample and fine bone, a somewhat elongated body on relatively short legs with tough hoofs.

The tail is fat, of medium size, S-shaped. The tip of the tail is lean, free of fat deposits and hanging down. Animals are usually horned.

In general, Lezgian sheep are small in size. The average withers height of ewes is 57.9 cm, rump height 59.1 cm, oblique body length 58.8 cm and chest girth 71.9 cm. Live weight is 25-55 kg in ewes and 35-65 in rams.

Some 75% of Lezgian sheep are white, often with coloured spots on the head, neck, and feet. Some 16% are black or black-brown and the rest (8-10%) are tan of various shades, grey or pied. The fleece cover is satisfactory and only 10-12% of sheep are poorly covered. The forelegs are usually covered with wool down to the knees and the hindlegs down to the hocks.

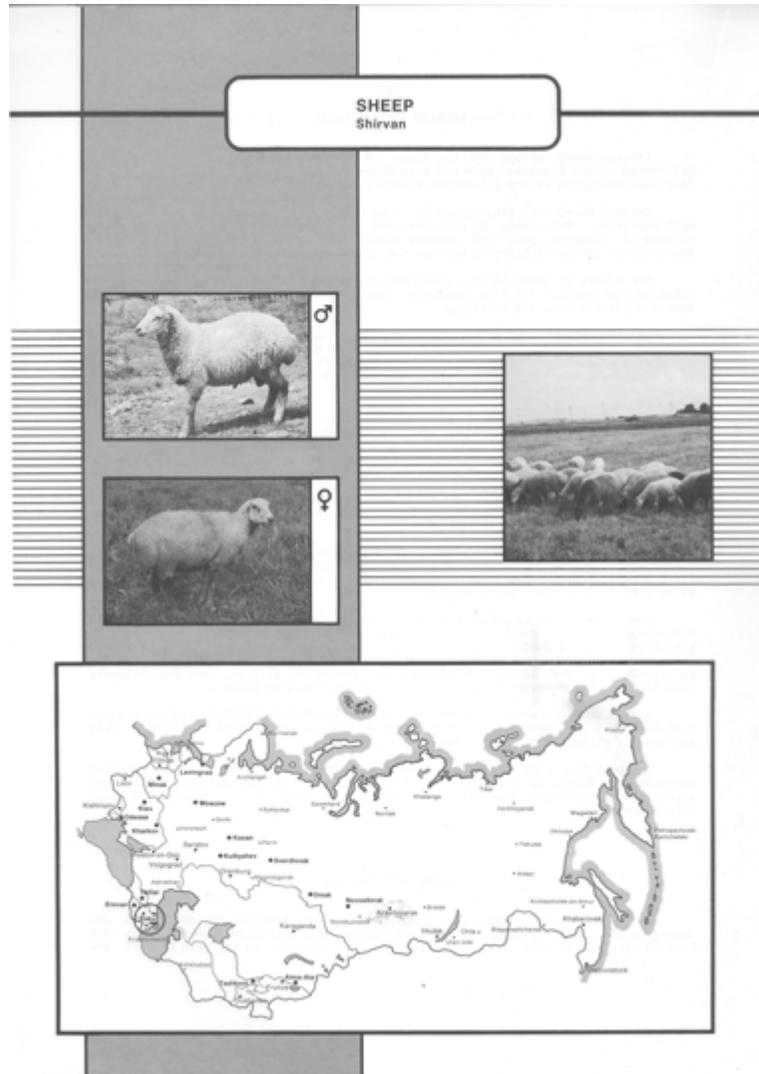
Sheep are shorn twice a year - in April and August-September. The spring fleece weight in ewes is 1.0-1.6 kg and the autumn one 0.4-0.8 kg. Rams produce 1.4-2.2 kg in spring and 0.6-1.0 in autumn. Lambs over one year of age clip 0.8-1.0 kg in spring and 0.4-0.9 kg in autumn.

The wool hangs in pointed locks; its quality is one of the best among coarsewooled breeds. Staple length is 14 cm (range 7-17.5 cm). True wool accounts for 60.5% (range 14.3-82.6%), guard hair for 1.7% (range 0.6-12.2%), and intermediate fibres for 37.8% (range 15.7-67.7%). The true wool length is 4 cm and the diameter is 16.0-29.5 μ , the length of intermediate fibres is 14.9 cm, and the diameter 30.0-57.8 μ . The diameter of guard hair ranges from 65.4 to 103.6 μ .

Among local coarsewooled breeds the Lezgian is distinguished by high milk yield - 65-80 litres per lactation, with marketable milk amounting to 35-40 litres. Ewes are usually milked from April to September.

The best flocks of the Lezgian breed are raised in southern Dagestan.

Further breeding and selection are aimed at increasing live weight and wool clip, and improving the quality of the carpet wool without any reduction in adaptation to local natural conditions.



SHIRVAN (Shirvanskaya)

The sheep of this breed are a mutton-wool-milk type of ancient origin and belong to the group of local (Caucasian) coarsewooled fat-tailed sheep. They are bred chiefly in the east and central regions of Azerbaijan on the left bank of the river Kura mainly in the Mugan, Salyany and Shirvan steppes and on the Apsheron peninsula.

Shirvan sheep are very similar to the Karabakh in conformation. As shown by their measurements (see Table 4.8) and live weight they are a large breed.

Table 4.8 BODY MEASUREMENTS OF SHIRVAN SHEEP (CM)

Measurement	Ewes		Rams	
	Average	Range	Average	Range
Height at withers	64.4	52-75	69.8	59-79
Chest depth	29.4	24-36	31.7	27-39
Body length	62.9	51-74	65.9	53-75
Chest girth	83.6	70-110	88.8	77-110
Cannon bone girth	7.7	6-10	8.2	7-11
Head length	19.3	16-26	21.4	18-29
Tail girth	57.2	30-91	70.3	50-95

Shirvan sheep are smaller than the Karabakh and they have a somewhat flatter and shorter body. The average live weight of ewes is 43 kg (range 33-59 kg) and of rams 50.7 kg (range 46-55 kg). On grazing, animals make high live-weight gains. The slaughter yield is 47%.

Fleece of Shirvans hangs in pointed locks and has a lot of brittle hair (kemp). The fleece weight (in 2 shearings) of ewes is 1.4-1.7 kg and that of rams 1.9-2.45 kg. Yearling sheep give 1.1-1.5 kg of wool, and lambs 0.3-0.4 kg.

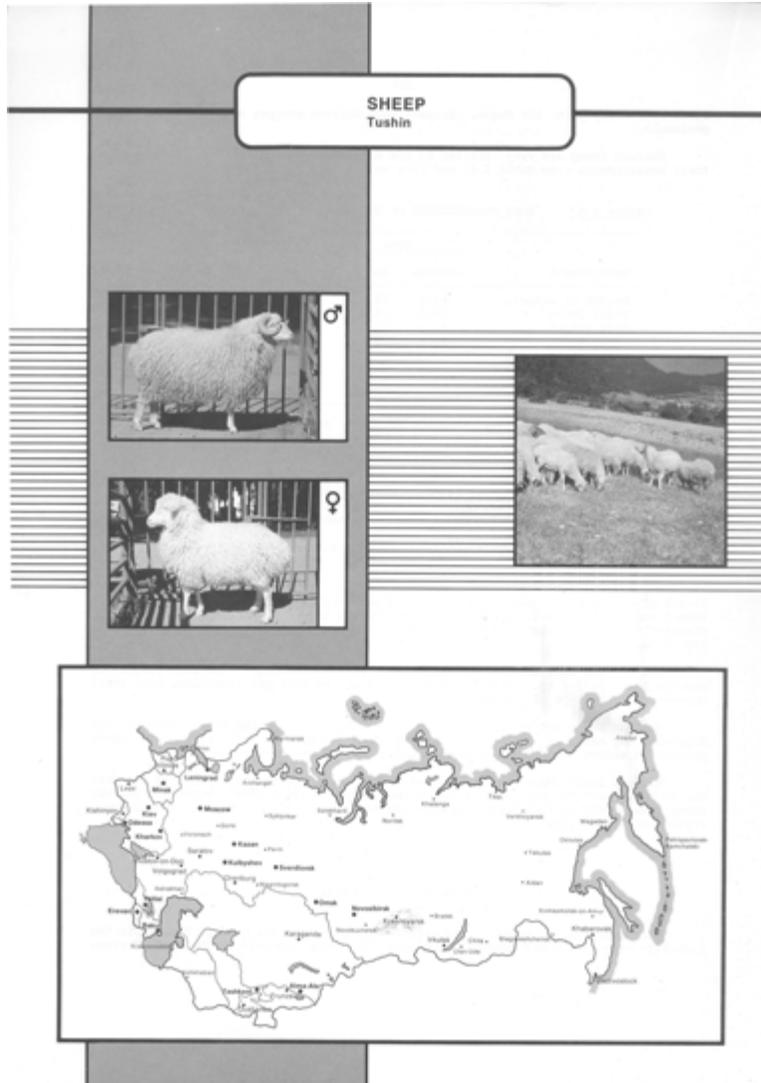
Most sheep (73%) are white with a red or greyish shade; the rest are black, black-brown, or light brown.

Shirvan wool is coarse and lacks uniformity. It contains 38% of true wool, 18-20% of intermediate hair, 20-22% of guard hair and not less than 20% of dead hair (kemp) and sometimes 30%. The staple length varies from 7.2 to 12.3 cm. The average diameter of true wool is 25.6 μ , of intermediate hair 38.5-46.8 μ and of guard hair 118-132 μ .

The lambing rate is 105-110 lambs per 100 ewes lambing. The live weight of newborn lambs is 2-4 kg. Ewes yield 40-60 litres of milk per lactation, the yield depending on the type of the sheep.

Shirvan sheep are valued for their good adaptation to the hot climate of the Mugan-Salyany areas of Azerbaijan. During long droughts as well as in cold snowy periods in winter sheep get supplementary hay and concentrate feeding.

Most of these sheep (up to 80%) are being crossed with the Azerbaijan Mountain Merino to improve mutton, wool and milk performance. As a result purebred Shirvan sheep remain only on individual holdings in Apsheron, Lenkoran, Masalli and Sumgait regions of Azerbaijan.



TUSHIN (Tushinskaya)

This coarsewooled breed of the mutton-wool-milk type was bred in Georgia in the 13th-14th centuries under conditions of year-long range husbandry. The breed derives its name from the Tushins, the people of Tushetia, the mountain district where they were developed. According to the breed regionalization plan, the Tushin breed is raised mainly in the Georgian SSR and partly in the Armenian SSR and in some districts of North Caucasus.

The Tushin sheep exhibit sturdiness and good adaptation to transhumance husbandry. When moving from winter quarters to summer ranges they can easily cover more than 500 km.

Tushin sheep have a strong constitution, a harmonious and compact conformation, ample bone, and tough hoofs. The brisket is full and round and the ribs are well sprung. The head has a straight profile. Rams have horns and ewes have rudimentary horns. The animals are relatively small in size. Withers height is 58-60 cm, chest girth 83-85 cm, and depth of chest

29-30 cm. The average live weight of rams is 58-60 kg and that of ewes is 40-42 kg. Table 4.9 shows the live weight at different ages under transhumance conditions.

Table 4.9 LIVE WEIGHT OF TUSHIN SHEEP AND LAMBS ON FARMS IN GEORGIA (KG)

Age	Ewes	Rams
Newborn	2.0- 3.6	2.2- 3.8
Weaners	17.8-21.8	18.8-22.3
6 months	21.2-26.4	21.2-29.1
18 months	32.9-45.7	40.4-52.8
30 months and over	34.6-47.7	45.6-63.2

Tushin sheep are fat-tailed (according to Bogolyubski they belong to the semi-fat-rumped breeds). Fat is deposited on the rump, in the thighs, and in the tail in the form of a fatty pad which is internally divided into two by a groove. The tail is of medium size or short; its tip is thin and free of fat. According to the shape and size of fat deposits, two types of sheep are distinguished: dumeuli and kentuli. The former have larger and somewhat pendent tails, which sometimes reach the hocks; the latter have raised tails at the height of the rump.

The meat of Tushin sheep is known for its palatability and a nice aroma free of the specific acrid smell of mutton. The carcass yield of meat and fat is 42.7-47.7% in wethers and 42.6-44.4% in ewes. With good feeding the carcass yield of fat rams at the age of 9-12 or 18 months is 50-56% of the live weight; the carcass weight ranges from 19 to 23 kg. In ewes the corresponding figures are 50-57% and 20.2-28.7 kg.

Tushin sheep produce coarse wool of better quality than nearly all other coarsewooled mountain breeds. The wool is white and lustrous. The first-grade wool contains 74% of true wool and intermediate fibres and 26% of guard hair. The diameter of true wool is 56 μ . The second and third-grade wool contains less true wool (35-44% respectively), and more guard hair (55-65% respectively). The diameter of true wool fibres is 26 and 27 μ respectively and that of guard hair is up to 70 μ . The locks are very wavy, 12-16 cm long. The wool of Tushin sheep is particularly valued in carpet making; it is also used for the production of worsted and cloth fabrics, and felt. The annual fleece weight for rams is 3.1-3.8 kg and that for ewes is 2.4-3.0 kg.

Milk yield is not high, 65-70 kg per lactation, of which marketable milk constitutes 10-15 kg. Lambing rate is rather low - 105-115 lambs dropped per hundred ewes lambing.

The number of Tushin sheep has increased three and half times over the last fifteen years. In 1980 the total was 928 136 (76% purebred) including 37 433 breeding rams, 19 109 other rams and 561 578 ewes and yearlings. For improvement in breeding flocks purebreeding is used. Thus preservation of the breeding type is ensured and hereditary stability of typical traits is increased. In all districts designated for raising of Tushin sheep grading up is widely used, which contributes to further growth of the Tushin population.

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