

TORI (Toriiskaya)

This is an all-purpose utility breed. It was developed in Estonia at Tori stud from 1890 to 1950, by crossing native Estonian mares with European halfbred stallions. The breed was founded by the stallion Hetman, the son of Stewart and an unknown hunter mare. Stewart was a crossbred of a Norfolk Trotter and an Anglo-Norman mare.

The formation of the breed involved extensive use of Hetman and his sons. As a result, a valuable breeding nucleus was rapidly formed. By the end of the 1930s, however, signs of inbreeding depression were found, which manifested themselves in a deterioration of performance and robustness. Crossing with Breton Post-horse stallions was used to eliminate the inbreeding depression. As a result, the massive type became widespread within the breed and the quality of the gaits began to decline.

A need also arose for a combination of utility and sporting qualities in the horses. To meet this need, a limited experimental new introductory crossing

between Tori horses and Hanoverian and Trakehnen stallions was undertaken.

The modern Tori is clearly a harness type and has a very clean and solid build. Its conformational features include a large or medium-sized head, clean-cut and sometimes with a shortened poll. The neck is medium in length and fleshy; withers are average in height, back long and flat, loin medium and broad, croup broad, long and well muscled. The chest is very broad and deep. The limbs are clean and properly set. The average measurements (in cm) of Tori stallions at the studs in 1982 were: height at withers 162, oblique body length 170, chest girth 200 and cannon bone girth 22.3. The colours are chestnut, bay and reddish-bay.

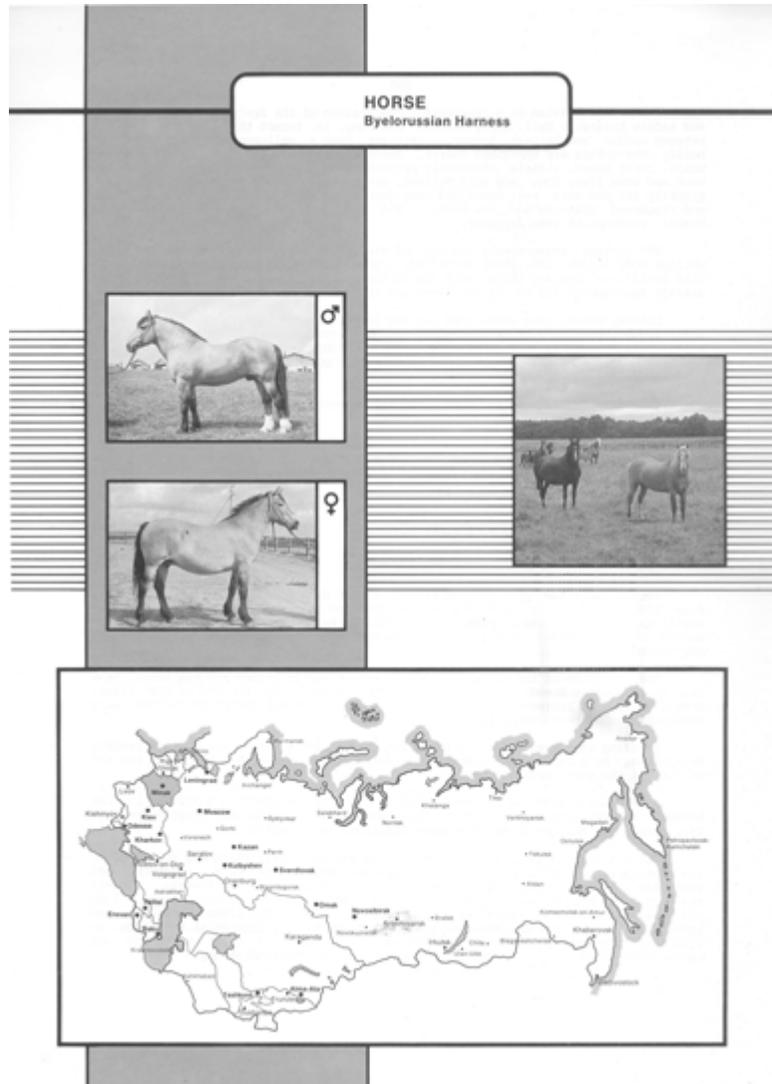
Tori horses have good performance. The breed records are 13 min 21.5 sec in 2000 m draught walk with a pull of 150 kg, 4 min 44.8 sec in 2000 m trot with a pull of 50 kg. The maximum draft endurance with a pull of 300 kg was 1238 m and the maximum pull 880 kg.

The breed consists of 10 lines.

The allele pool of biochemical polymorphism is four types of esterase, the absence of the H allele, six transferrin types and rare M and P alleles.

The breed's fertility is quite high, reaching 86 foals per 100 mares.

The breed has spread throughout Estonia. The main breeding centres are Tori stud and the breeding farms at Pyarivere and Aravete state and collective farms.



BYELORUSSIAN HARNESS (Belorusskaya uprazhnaya)

The Byelorussian Harness breed was formed on the basis of the native northern forest type of horses improved by the Døple (from Norway), Ardennes and Brabançon breeds. The Døple influence was the strongest. Long-term inter se breeding of various generations of crosses created a breed most suitable for the current requirements of Byelorussian agriculture. The horse has adapted well to work in wooded areas with swampy and sandy soils. It can also be used for milk and meat production.

It is a medium-sized horse with the characteristic conformation of a harness horse. The head is not large, the forehead wide, the neck well muscled and average in length, the withers average in height and length, the back long, flat and often slightly dipped, the loin flat and short, the croup wide, nicely rounded and well muscled with a normal slope, the chest wide and deep. The limbs are clean and solid. The mane and tail are thick but the fetlock tufts are small. The stallions' measurements (in cm) are: height at withers 153, oblique body length 163, chest girth 184, cannon bone girth 21.5. Live

weight is 540 kg. The mares measure 150, 161, 183 and 21 cm respectively. Their live weight is 490-500 kg. The colours are dun, bay, chestnut and light bay.

The top performance results are: the 2 km walking record with a pull of 150 kg is 14 min 41 sec; the 2 km trotting record with a pull of 50 kg is 5 min 01 sec. The best pulling endurance result with a pull of 300 kg was 388.8 m. The maximum load capacity has reached 660 kg.

The mares' average daily milk yield is 9 litres. At established koumiss farms the best mares produce 2560 litres of marketable milk in a 6-month lactation.

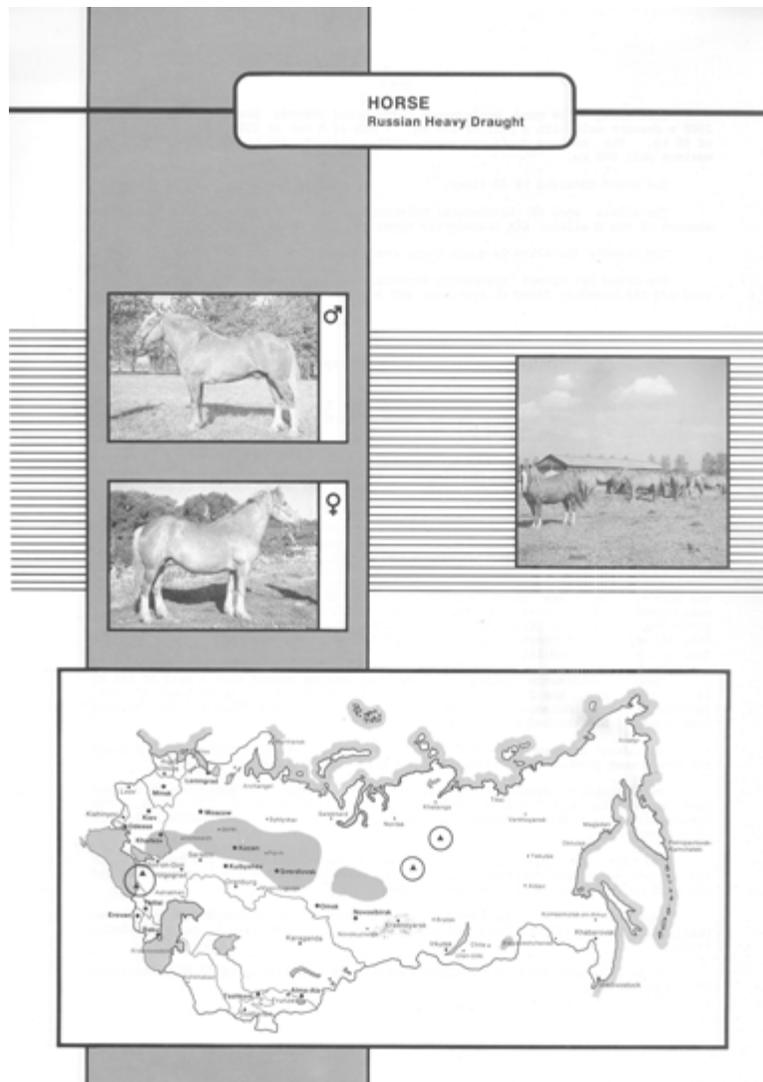
The dressing percentage is 51. Despite the fact that the Byelorussian matures late, by weaning at 6-7 months the foals reach a live weight of 170-190 kg. The Byelorussian has a high fertility and longevity. Mares have often remained fertile to the age of 26.

Two types, the large and the medium, are distinguished within the breed.

There are 6 lines and 4 mare families. The leading breeding centres are Zarechye stud and the stud on Pobeda state farm in Byelorussia.

Improvement is by pure breeding. Two volumes of the studbook have been published, listing 135 stallions and 616 brood mares. A new line is currently being tested.

As at 1 January 1980, the Byelorussian Harness breed numbered 93 040, including 27 560 purebreds.



RUSSIAN HEAVY DRAUGHT (Russkaya tyazhelovoznaya)

The breeding of a small draught horse which was strong, sufficiently fast, easy to keep and economical as regards management and feeding, went on in Russia concurrently with the breeding of a large heavy draught breed. The genetic material for the breed came from native Ukrainian breeds, the mountain Ardennes and, in part, from the Brabanmated with Brabançonson and the Orlov Totter.

Systematic breeding began in the 1860s. The main nucleus of the breed was formed at Peter's Academy (now the K. Timiryazev Moscow Agricultural Academy), Chesma stud in Voronezh region, at Kochubei and Chaplits studs in Poltava region and Derkulski stud in the Ukraine. Meanwhile, grading up of native horses with the Ardennes was taking place. In 1875 there were nine Ardennes stallions in Russia; the number rose to 597 by 1915. By the beginning of the 20th century the Ardennes type became the most popular in Russia. Even in regions where there was a demand for large heavy draughts and where high grade Ardennes were

mated with Brabançons, the crosses retained the old denomination of Ardennes. During the breed formation period, a role of particular importance was played by two breeding centres, the Chesma and the Dubrovsk, and subsequently by the Pershino and Khrenov studs. By the beginning of the 20th century, the world's zootechnical public was introduced to the Russian Heavy Draught at the 1900 Paris Exhibition. However, the First World War, followed by the Civil War, just about wiped the breed out. In 1924, only 92 Ardenne stallions were found. In 1923, breeding animals at Dubrovsk stud were moved to Novoalexandrov stud in Voroshilovgrad region, while the Khrenov stud stock was moved first to Pershino and subsequently to Uralsk and Kuedin studs. By the year 1937 the stock of purebreds was reconstituted and isolated as an independent breed.

Due to its high-profit feeding and high adaptability, the Russian heavy draught became quite widespread. It is now bred in the Ukraine and North Caucasus, in Udmurtia and Byelorussia, in Kirov, Sverdlovsk, Perm, Vologda and Archangel regions and in western Siberia.

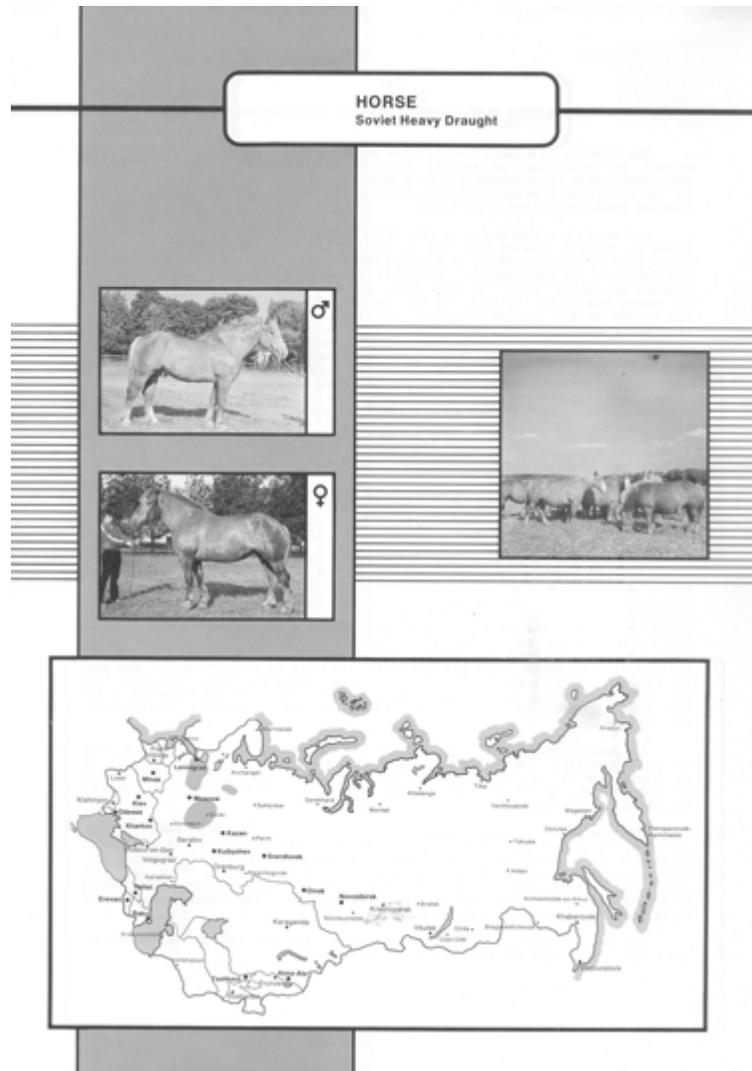
The horse is not large yet heavily muscled; its trunk is long and broad; the joints are well developed and the limbs solid. The average measurements (in cm) of stud stallions are: height at withers 152, oblique body length 161, chest girth 200 and cannon bone girth 22.5; mares: 149, 158, 192 and 21.2 respectively. The stallions' live weight is 600-700 kg; that of mares is 550-600 kg. The characteristic features are as follows: the head is average size, clean cut, with Oriental breediness; the forehead is wide and the profile is straight. The neck is short, broad, fleshy and high crested in stallions. The withers are low and broad; the back is long, broad, often somewhat soft; the croup is long, drooping; the loin is flat. The chest is deep and broad; the ribs are steeply sloping. The front legs are short, set too far apart; the pasterns are sometimes short and ringboned. The knee-joints are often too far back. The commonest colour is chestnut; brown and bay are rarer.

The Russian Heavy Draught horse is strong, shows a fair speed and has a very willing disposition. The 2000 m draught walking record with a pull of 150 kg is 15 min 5 sec; the 2000 m trotting record with a pull of 50 kg is 5 min 20.4 sec; the draught endurance record with a pull of 300 kg is 1091 m. The maximum pull record is 820 kg or 117% of live weight.

The Russian Heavy Draught matures early; by weaning, the foals reach 250 kg. The mares are good milk producers. At koumiss farms mares produce up to 2500 kg of marketable milk in 6-7 months of lactation. The record milk yield is 5540 kg. Russian Draught horses can be used for periods of up to 25 years. They also have good fertility and longevity. The stallion Kolodnik (b. 1952) was used for breeding up to 1978, while the mare Logika (b. 1962) in 18 years of reproduction produced 18 foals, remains in good health and is still fertile.

The breed's structure includes 2 intra-breed types, the Ural and the Ukrainian, and 6 male lines. One new line is being formed.

The transferrin polymorphism has been studied in 862 horses and the allele frequency is as follows: D 0.33, F 0.31, H 0.06, O 0.01, R 0.27.



SOVIET HEAVY DRAUGHT (Sovetskaya tyazhelovoznaya)

This breed was developed during the period from the '80s and the '90s of the last century up to 1952 when it was recognized as a new heavy draught breed. The breeding zone was quite extensive, including Yaroslavl, Vladimir, Gorki, Penza, Ryazan, Tula, Tambov, Voronezh and Orel regions and Mordovia. This was a zone with a developed industry and intensive agriculture, requiring strong and sufficiently fast horses of ample size. Success in the breeding of this type of horse was guaranteed by a stable supply of fodder.

Initially, native horses were improved by stallions of the Belgian Brabançon draught breed. In 1885, three Brabançon stallions were recorded in stud use in the above zone; in 1895 they numbered 58, in 1905 - 394 and in 1945 - 891. The breed nucleus was initially at Khrenov stud and subsequently at Pochinkovsk stud. Mares of multibreed origin (Percheron-Ardenne-Suffolk-Danish and different varieties of saddle horse) were mated with Brabançon stallions for three to four generations and the

progeny were bred inter se. At the same time grading up was taking place on a large scale and crossbred stallions were widely used.

In 1936, three state breeding centres, Pochinkovsk, Mordovian and Gavrilovo-Posad, were established. Alexandrov farm in Vladimir region and Yaroslavl farm branched off from the latter. Subsequently, the Pochinkovsk and the Mordovian facilities were transformed into studs.

As the intensification of agricultural production proceeded, demand for massive heavy draughts was growing. The influence of Brabançons began to spread. In the Baltic zone, new breeds, the Lithuanian and the Estonian Heavy Draught, began to be formed on a different local mare basis.

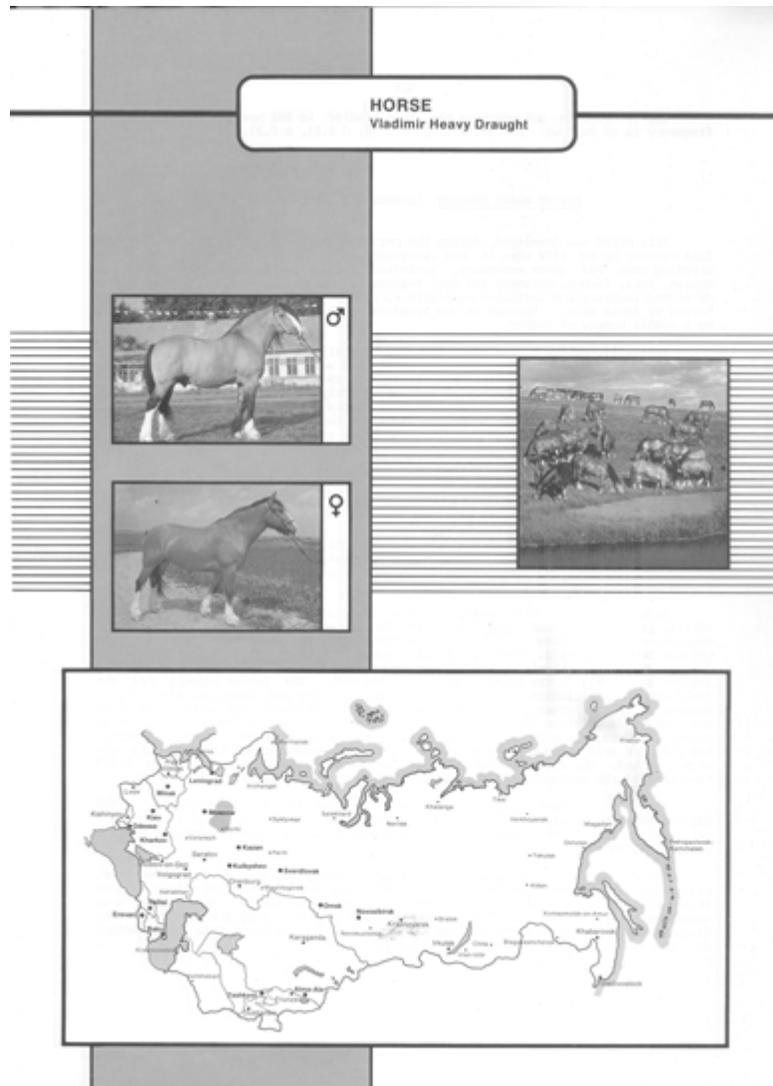
Modern purebred Soviet Heavy Draughts are distinguished by ample height and clearly expressed harness type. They are heavily muscled and boned. The average measurements of breeding stallions at the studs (in cm) are: height withers 163, oblique body length 172, chest girth 215, cannon bone girth 25; mares: 160, 168, 205 and 22.75 respectively. The live weight of stallions is 850 kg and sometimes reaches 1 000 kg; the mares' weight is 650-750. The Soviet Draught has the following characteristics: the head is average in size and clean-cut, the neck is average in length, often on the short side and well muscled; the withers are low; the back is long, often slightly dipped, the loin is average in length, the croup is broad, furrowed, drooping and heavily muscled, the chest is broad, average in depth, the ribs are well sprung. The forelegs are often pigeon-toed and the hind ones are sickle-hocked. The build is quite coarse, soft and yet much cleaner and more solid than that of the Brabançon. The predominant colours are chestnut, brown and bay.

The Soviet Heavy Draughts are good utility horses and breeders. The established records are: 2000 m draught walk with a pull of 150 kg in 11 min 51.8 sec; 2000 m trot with a pull of 50 kg in 4 min 50 sec; draught endurance with a pull of 300 kg - 1138 m; maximum pull, 851 kg.

The Soviet Heavy Draughts mature extremely early and are good milk and meat producers. With normal feeding and management the foals at weaning attain a live weight of 360-400 kg. The breed's record milk yield is 6320 kg. They have a good weight gain per fodder unit but demand good management. They are insufficiently disease resistant and adapt to extreme management conditions worse than other breeds do. The mares' fertility varies from 65 to 76%.

The breed comprises 2 lines and 3 mare families. A new line is now being developed.

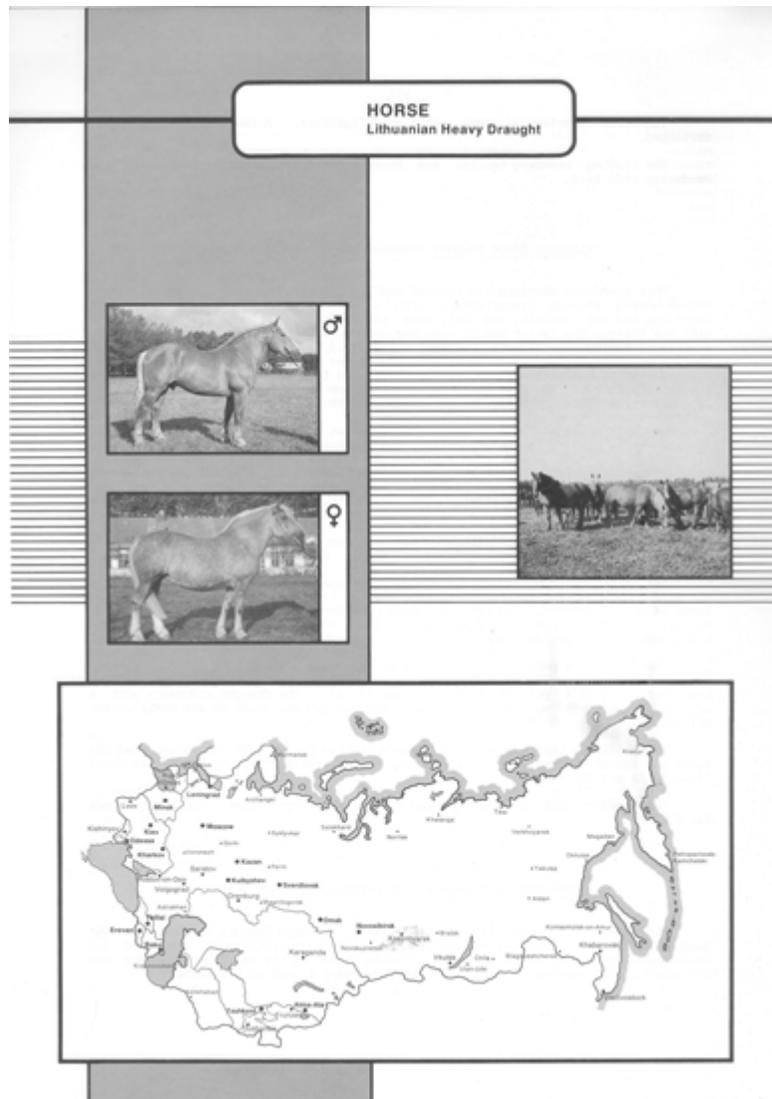
The leading breeding centres are Pochinkovsk stud in Gorki region and the Mordovian stud farm.



VLADIMIR HEAVY DRAUGHT (Vladimirskaya tyazhelovoznaya)

This breed was developed in Ivanovo and Vladimir regions on the basis of large native horses through crossbreeding with various draught breeds, such as the Percheron and the Suffolk, and later with the Clydesdale and, to a lesser extent, with the Shire. The latter was in wide use only from 1919 through 1929. The aim was a horse of medium draught power or less which would have rather high speed. In the formation of the breed, a particular role was played for more than a hundred years by Gavrillovo-Posad breeding station, previously a stud farm and a state breeding stable. Its experts invested no small effort in the creation of horses of uniform type in the region. In 1946 the new heavy draught breed was recognized. Vladimir Draughts combine ample size, stout build, speed and an energetic temperament. Compared to the Clydesdale, the Vladimir has a more developed chest and cleaner and more solid build. The average measurements (in cm) of the stallions are: height at withers 160, oblique

body length 165, chest girth 196, cannon bone girth 24. The stallions' live weight is 750-800 kg. The mares' measurements (in cm) are 157, 162, 188 and 23.0 respectively. The inadequate size of Vladimir Draughts is due to their being reared in simple management conditions at collective farm studs. The features of the conformation are: a long clean-cut head with the profile often arched; elongated and well-muscled neck; sufficiently pronounced and long withers; back somewhat long, a little dipped; short and broad loin; long, moderately sloping croup; long legs, clean and properly set. The chest is broad but not deep and the ribs are insufficiently sprung. The hair of the mane, tail and limbs is well developed. The Valdimirs have excellent gaits. The predominant colour is bay; brown and black are less frequent. There are characteristic markings on the head (a star or blaze) and legs. The Vladimir's performance test results are good. The 2000 m walking draught record with a pull of 150 kg is 12 min 34.2 sec; the trotting draught record for the same distance with a pull of 50 kg is 4 min 34 sec. The draught endurance with a pull of 300 kg is 987 m, while the maximum pull was 820 kg, 94.3% of the horse's live weight. The Valdimirs have a high growth rate, with the foals' live weight reaching 200 kg by the age of six months. The mares are quite fertile, the live birth rate being 75-80 foals per 100 mares. The breeding work is being carried out at the Yuryev-Polski stud. The breed has 4 lines.



LITHUANIAN HEAVY DRAUGHT (Litovskaya tyazhelovoznaya)

This breed was developed in Lithuania by crossing Zhmudka horses with the Swedish Ardennes. The third and fourth generation crossbreds (2nd and 3rd backcrosses) were bred inter se. The breeding began in the early 20th century and the breed was recognized in 1963. In 1964 there were 62 000 in Lithuania.

The breed has a solid build, large size and harmonious body proportions. The head is coarse, clean cut and large; the neck is short and well muscled; the back is long and sometimes a little dipped; the loin is flat and broad; the croup is broad, long and well muscled; the limbs are solid and properly set. Defects include coarse head, dipped back, pin-toes and sickle-hocked hindlegs. The average measurements (in cm) of breeding stallions are: height at withers 160, oblique body length 166, chest girth 205, cannon bone girth 24; mares: 157, 165, 200 and 23 respectively. The commonest

colours are chestnut and bay. The stallions' live weight varies from 850 to 920 kg.

The performance records are as follows. The 2000 m walking draught record with a pull of 150 kg is 13 min 20 sec; the trotting draught record for the same distance and a pull of 50 kg is 4 min 45 sec. The draught endurance with a pull of 300 kg is 1397 m with a maximum pull of 860 kg. The Lithuanian Heavy Draught has good longevity and fairly high fertility. The foal crop at the best studs is 80%; survival rate up to one year of age is 76-79%.

Their solid build enables Lithuanian Heavy Draughts to display good adaptability to extreme and harsh conditions. When used to improve meat and milk yield in native Altai horses, first crosses and backcrosses had better live weight indices and higher growth rate; they better withstood the conditions of year-round grazing. Crossbreeding of the native Altai and improved horses with the Lithuanian Heavy Draught is being used to develop a new breed.

The breed comprises 9 lines. It is bred at Nyamun, Sudav and Zhagar studs and at horse breeding units of collective and state farms.