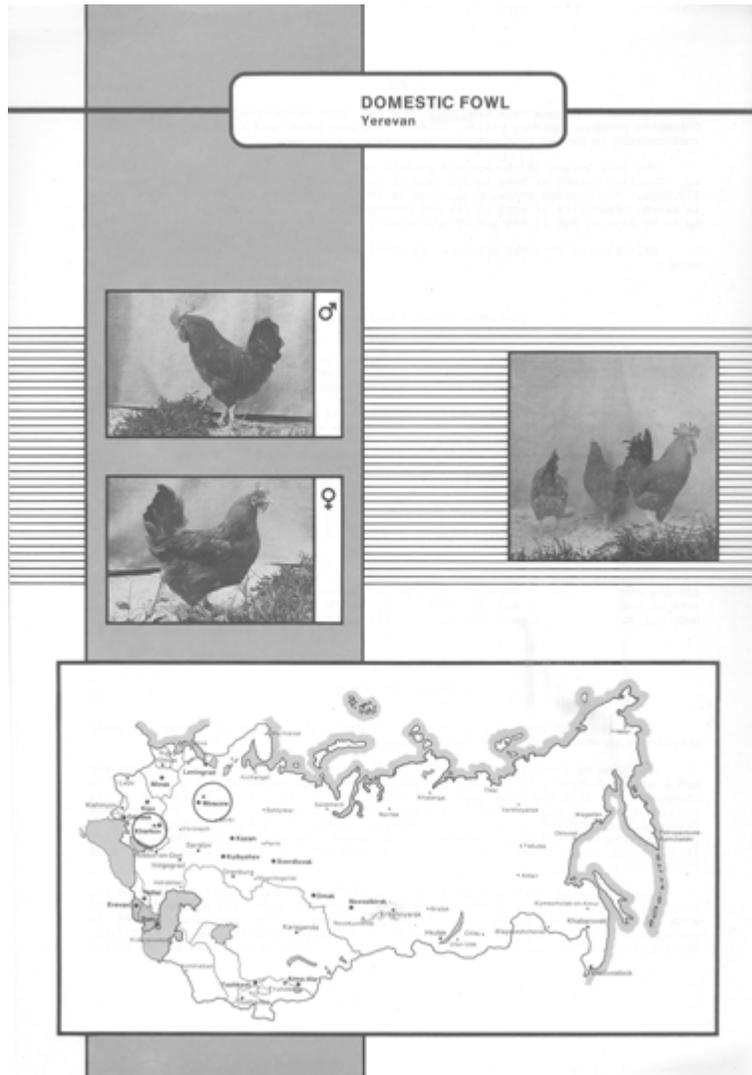


UKRAINIAN MUFFED (Ukrainskaya ushanka)

This is a local breed of the central and northern Ukraine; its origin is unclear. Its distinguishing feature is a short thick beard and thick muffs covering small ear-lobes. This character is dominant over absence of beard. The breed is raised by amateur breeders and in gene conservation flocks of research institutes. The stock is 200 head. The head is large and broad, with a rose or single comb and short strong beak. The body is compact, round, abundantly feathered. Muffed chickens are short and thickset with relatively short legs. The tail is well developed, with rounded feathers, and sloping somewhat backwards. The plumage is usually black, light grey or red-brown, but there are also white, spotted, silver and mottled varieties. Muffed chickens have a very strong brooding instinct. Chicks feather very early. The live weight of adult hens is 1.8-2.3 and of cocks 2.3-3.5 kg. Age at sexual maturity is 150-180 days. The average annual production is 150-160 eggs of 50-60 g. Egg shell is light brown. Production of champions reaches 200-214 eggs per year. Fertility of eggs is 93% and hatchability 75-

80%. Survival rate of the young is 94% and of adults 95%. Due to their thick plumage and compact body build, they have a good resistance to low temperatures.



YEREVAN (Erevanskaya)

The breed was developed in Armenia during 1949-74 from the cross of local chickens with Rhode Island Reds and New Hampshires.

Chickens of local populations were well adapted to the continental climate but had a low productivity - 100 eggs per year with an egg weight of 52 g. In 1949 a champion layer from the local population which laid 107 eggs in the third year of its production period, was mated with a Rhode Island cock of 1947 hatch. The cock was heavy (3.7 kg) and had a typical conformation. Among the crossbreds, a cock with a yearling weight of 3.0 kg was chosen. It was mated with another local champion which laid 191 eggs in the fifth and 123 in the seventh year of production and had a good hatchability. Backcrosses having 3/4 of local and 1/4 of Rhode Island inheritance, formed the breeding nucleus (n=11). Production of these birds was over

150 eggs and one hen with a live weight of 2.4 kg laid 213 eggs in a year. Later, one cock was used in mating both with the hen which originated the breed and with its female offspring. The third generation of chickens, possessing 7/8 of local and 1/8 of Rhode Island inheritance, was bred inter se after 1952, thereby preserving the characteristics of the local birds, and creating a one-type line in 4-5 years. Hens of this line had an average annual production of 153 eggs averaging 56 g. A champion layer gave 241 eggs. The average live weight of hens was 2.0-2.2 kg and that of cocks 3.0-3.7 kg.

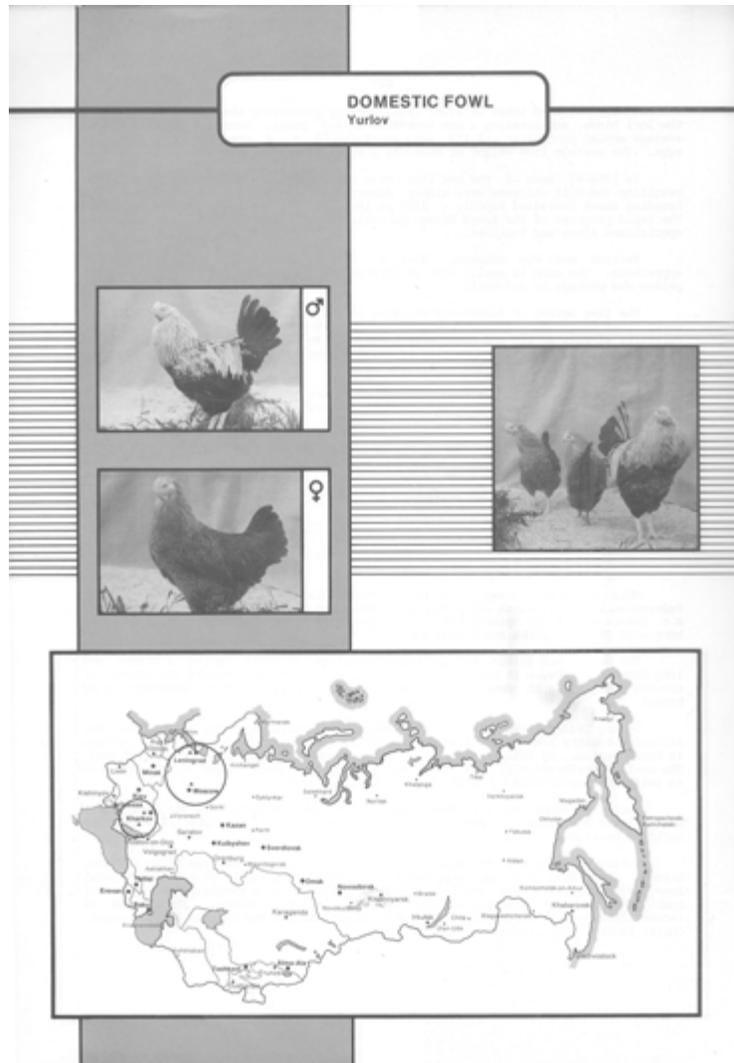
In 1964-65 hens of the new line were mated with New Hampshire cocks. The resulting red-buff chickens were widely distributed in Armenia and Azerbaijan. The breeding stock increased rapidly - 2500 in 1965, 109 000 in 1975, 337 000 in 1980. The rapid progress of the breed became possible by the creation of highly productive specialized lines and families.

Yerevan meat-egg chickens have a strong constitution and distinctive appearance. The comb is small, with uniform points; ear-lobes are pink; shanks are yellow and plumage is red-buff.

The live weight of 8-week-old chickens is 0.8 kg; adult hens weigh 2.2-2.5 and cocks 3.5-4.5 kg. Age of sexual maturity is 170 days. Egg shell is brown. Fertility of eggs is 95% and hatchability 80-85%. Mortality of the young is 5-7% and of adults 5%. The average production is 180-200 eggs per year; egg weight is 58-60 g. The production of champions is 270-290 eggs.

Crossbred progeny of Yerevan hens and White Leghorn cocks produce 230 eggs per year weighing 60 g. The live weight of adult layers is 1.8-2.0 kg. Specialized egg lines of Yerevan hens are used as female parents in crosses with male lines of White Leghorns.

Specialized dual-purpose (meat and egg) lines of Yerevan chickens are a valuable genetic resource for the creation of new synthetic meat-and-egg lines of broiler crosses.



YURLOV (Yurlovskaya)

This breed was created in the Central Black-Earth zone of the Russian Federation in Orlov, Kursk and Voronezh regions, by means of traditional selection. M.F. Ivanov was of the opinion that the Yurlov breed originated from crosses of local hens with fighting cocks and Brahma males. The breed was formed by prolonged selection of cocks having a strong and long-drawn-out crow. It was believed that selection on the beauty and length of crowing would help to develop a strong constitution with robust body and broad breast.

During 1941-45 the bulk of the Yurlov population was lost. In 1948, the All-Union Poultry Breeding Institute brought 27 specimens from Goryaninovka village in Kursk region. By 1951 the gene conservation population had increased to 200 head. The average performance in this flock was 124 eggs per year. Later it was possible to raise the performance up to 154 eggs of 71 g per year.

Yurlov chickens are the ancestors of some new home-bred breeds: Pervomai, Adler Silver and Zagorsk Salmon chickens still have in their genotype 1/2 to 3/8 of Yurlov inheritance.

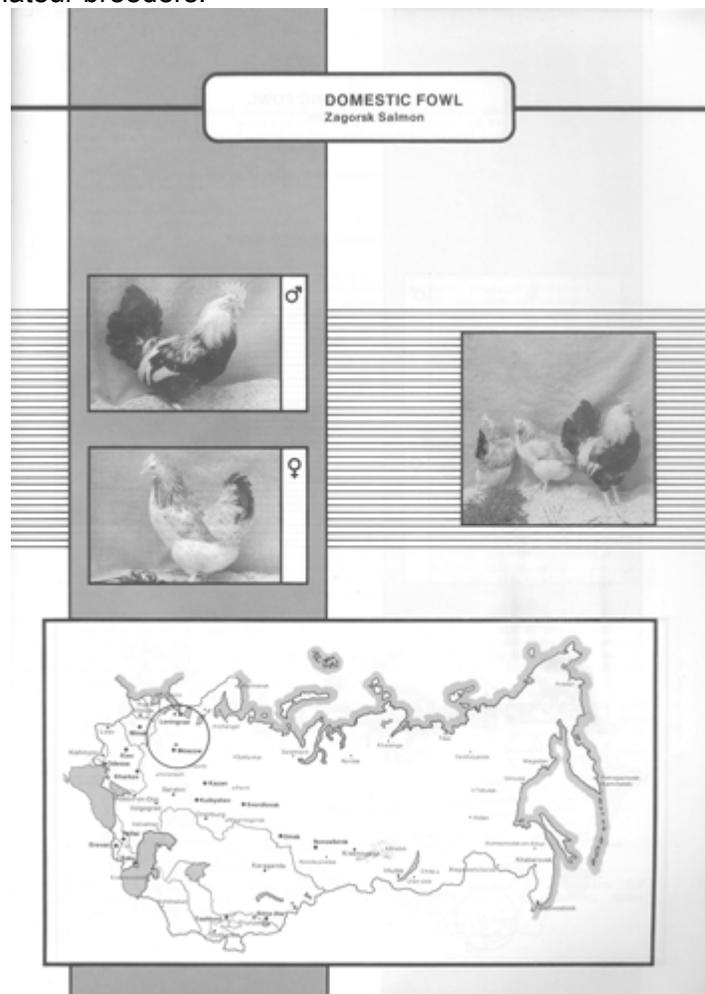
Yurlov chickens have the well-manifested characters of meat-type Asian and game breeds. Their body is broad, deep and long. The head is small, with broad frontal bone, large orbital arches and red ear-lobes. They have a single, rose or walnut comb. The legs are long and strong, yellow or black in colour. The plumage is rather fluffy and of various colours; dark silver, salmon and red are the commonest. Chicks feather very slowly.

The live weight of 8-week-old chickens is 0.9-1.2 kg; adult hens weigh 2.6-3.0 and cocks 3.5-4.0 kg. Annual production is 160-180 eggs of 60-80 g.

Egg shell is pink-brown. Fertility of eggs is 91% and hatchability 80%.

Survival rate of the young is 90% and of adults 88-93%.

The Yurlov breed is kept in gene conservation flocks at research institutes and by amateur breeders.



ZAGORSK SALMON (Zagorskaya lososevaya)

This breed group is used for meat and egg production. It was created during 1950-59 by breeders from the Ail-Union Poultry Breeding Research Institute in the Moscow region starting with a four-way cross. In 1950 they made

reciprocal crosses of Russian Whites with the New Hampshire, Rhode Island Red and Yurlov breeds. The F₁ crosses were backcrossed to Rhode Island Red and Yurlov cocks.

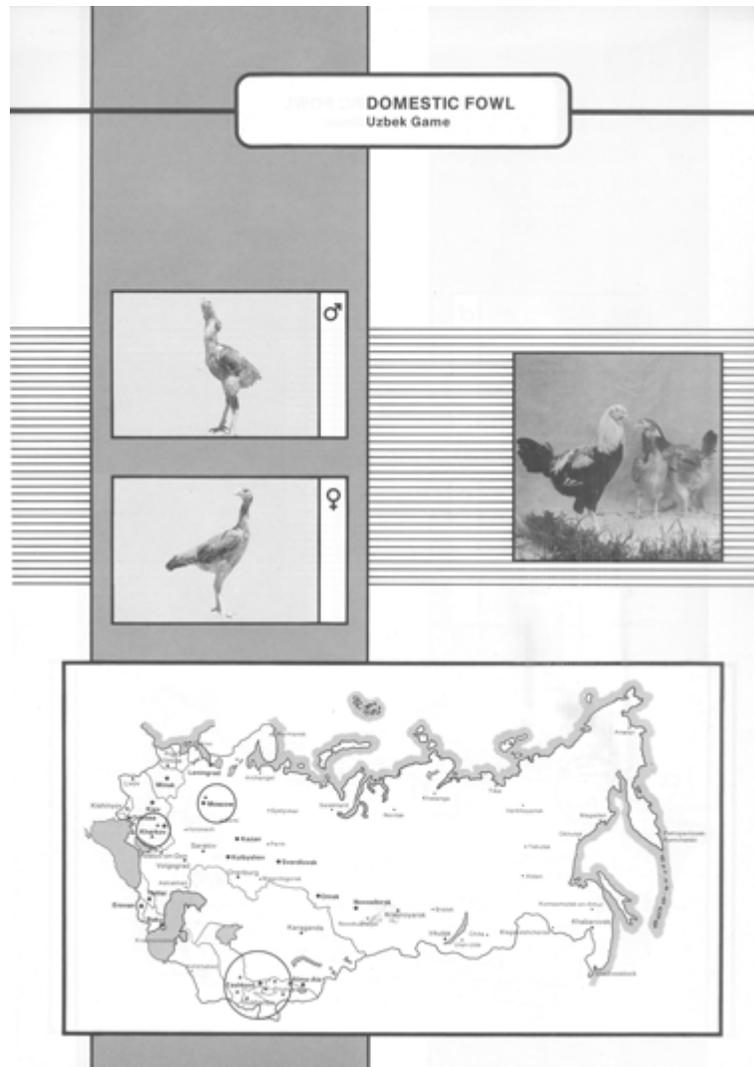
The foundation birds had a high production and viability. For example, Rhode Island Red cocks had female parents which laid not less than 180 eggs per year and Yurlov cocks descended from a hen which laid 185 eggs. In 1953 the number of Salmon chickens having 3/8 of Yurlov blood was 227. They were bred in a closed population where family selection was used to combine high laying rate, viability, egg weight and good fleshing. The live weight of the 90-day-old Zagorsk Salmon cockerels was 1.7 kg; 90.6% of carcasses were rated as first grade.

The Zagorsk Salmon breed used to be numerous in Krasnodar and Stavropol territories and in Moscow and Tambov regions. During the last five years they have been bred only in two populations in research institutes; the total stock is 600 head.

The Zagorsk breed is raised for meat and egg production. They have a deep and broad body. The head is of medium size, with a single comb and red ear-lobes. The neck is also of medium size with silvery hackles in cocks. Flight and tail feathers are light brown in hens and almost black in roosters. Shanks are short and yellow. Feathering of the young is slow and the brooding instinct is weak.

The live weight of 7-week-old pullets is 0.85 and that of cockerels is 1.00 kg; the live weight of adult hens is 2.7 and cocks weigh 3.7 kg. Age at sexual maturity is 180 days. The average annual production is 170 eggs of 60-62 g; for champions the corresponding figure is 211-216 eggs. The egg shell is thick and brown in colour. Fertility of eggs is 91% and hatchability 75-80%. Survival rate of the young is 93% and of adults 92%.

A characteristic feature of Zagorsk Salmon chickens is polymorphism in the down colour of day-old chicks. This colour varies from absolutely white, or white with dark spots, to light brown with longitudinal stripes. Selection is aimed at autosexing day-old chicks by the down colour.



MEAT BREEDS

UZBEK GAME (Uzbekskaya boitsovaya)

This breed was formed in ancient times in Central Asia by selection for aggressiveness of cocks, massive body, strong constitution and skeleton, under conditions of scarce feeding and adverse management.

The breed has a wide distribution in Bukhara and Samarkand regions under the name "kulang" and in Fergana valley and Kirgizia as "dakan". It is said that in the past "kulangs" were used for breeding some English commercial breeds.

Long selection for sporting purposes (cock fights) led to the formation of chickens with unique exterior and constitution. They are large, with a massive vertically-set body. The head is small, slightly flattened from side to side; the comb is small, pea-shaped, often reduced. Eyes are round, gleaming, vivid. Legs are long. Plumage is thick, tight to the body; its colour is variable. The temperament is lively and aggressive.

The live weight of 9-week-old pullets is 0.97 and that of cockerels is 1.29 kg; adult hens weigh 3.2-3.8 and cocks 4.0-7.0 kg. Age at sexual maturity is 215 days.

Annual production is 105-120 eggs of 55-60 g. The egg shell is light brown. Fertility of eggs is 70% and hatchability 80-85% Survival rate of the young up to 9 weeks of age is 98% and of adults 97%.

Uzbek Game birds are well adapted to local conditions. The breed can be used in the creation of new lines for the broiler industry of Central Asia.