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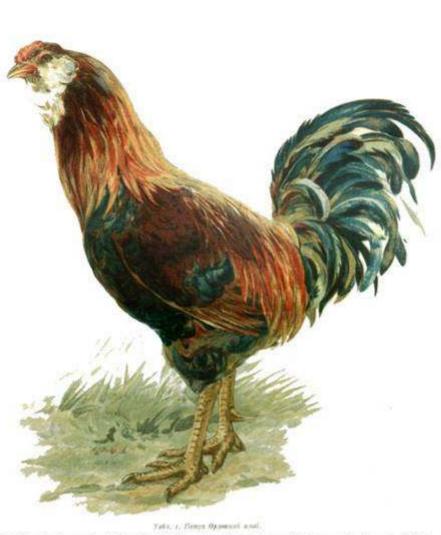
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ORLOFF CHICKEN BREED

By: Irina Moiseyeva, Michael Romanov, Helene Ovsyannikova and Andrei Alimov

An old Russian breed of **Orloff chickens is widely** known not only in Russia but also in other countries. It has been included in the poultry catalogues of chicken breeds in many countries. Many papers have been published about this breed and series of studies have been conducted to clarify its genetic characteristics. Due to its wide within breed including diversitv several varieties depending on plumage colour, body size (Large Fowl vs. Bantam forms) and geographic distribution, descriptions of the breed and requirements for its stan-



A Black-Breasted Red Orloff cock. Genetics of Domestic Fowl, 1926.

dard appearance and plumage may vary in different countries and between breeders.

In the present paper, the authors have set the goal to familiarize the readers of this magazine with some general information about the breed. We have mainly focused on the features of the Orloff breed of Russian type, that is, of Russian selection. The Orloff chicken is considered to be a national heritage breed in Russia like the Orlov Trotter, Yaroslavl cattle, Romanov sheep, Borzoi dog (Russian wolfhound) and other prominent breeds of Russian domestic selection. The Orloff breed has a number of varieties depending on plumage colour: Black-Breasted Red, Brown-Breasted Red, Spangled, Mottled, Brown-Breasted Mahogany, Black-Breasted Mahogany, Cuckoo, White and Black (a rare variety). Also in bantams there are several colour varieties.

ORIGIN

The region of origin is Central Russia. Time of origin: late 18th century.

There are certain reasons to believe that the creation of the breed took place in the estate of Count Alexei Orlov-Chesmensky (1737–1807/1808), a prominent political and military figure during the rule of the Russian Empress Catherine II (1729–1796), and the chicken breed appeared to get its name after him. In regard to the place of its origin, there are also other opinions, but the majority of Russian experts in the field of poultry breeding adhere to the above mentioned version. It is known that Count Orlov has been engaged in breeding varieties of chickens and pigeons, and the famous Orlov Trotter was also created thanks to his direct participation.

Original stocks, which became the basis for the creation of the Orloff chickens, have not been clearly determined. In this regard, there are various assumptions that they might have come from: (1) the Gilan chickens bred in the Persian province of Gilan and an unknown breed, which had muffs and beard (Gerasimov, 1914), or (2) a crossing between the Malay breed and crested or bearded fowl (Abozin, 1885; The Encyclopaedia of Poultry, 1921). Contemporary poultry fanciers have noticed that sometimes in the offspring of Orloffs there may be individuals with traits of the Gilan and the Old English Game breeds. Note that Count Orlov was fond of cockfighting and imported the English gamecocks. It is known that the first developed variety of Orloffs had red plumage colour.

About the Gilan breed, it is known that it existed in Russia in the early 20th century as an independent breed and simultaneously with the Orloffs. The standard and a drawing of the Gilan chickens can be found in the Album of Husbandry Poultry Breeds (1905) (Figure 2). The Gilan chickens differ from Orloffs in many traits, bearing a similarity in the presence of beard and muffs. They have a small, elongated head; beak and shanks are white. On the contrary, Orloffs have a rather large head, with yellow beak and shanks.

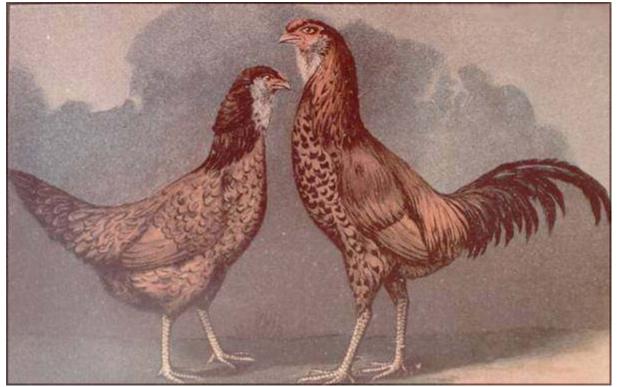


Fig. 2. A pair of Gilan breed. Source: "Album of Husbandry Poultry Breeds", 1905.

Despite the available information in Russian literature about the origin and history of the Orloff breed and simultaneous existence of both breeds, Orloff and Gilan, in a particular period on the territory of Russia, there is an erroneous assertion in current foreign publications (e.g., Graham, 2006; Percy, 2006; Lewis, 2011) and in the English Wikipedia (<u>http://www.en.wikipedia.org/wiki/Orloff (chicken)</u>) that some supposedly contemporary studies would have shown that this breed is not Russian but have the sole Persian origin. Supporters of these views on the breed origin should be aware that almost all breeds of chickens are created by crossing several breeds. The Orloff breed is not an exception. In addition, there are some descriptions of the Orloffs in the contemporary foreign poultry sources (e.g., <u>http://www.ultimatefowl.com/wiki/index.php?title=Russian Orloff</u>) showing significant deviations from the Russian breed requirements accepted among practicing breeders.

The place of origin of the bantam Orloff is Germany. Their development was referred to the 1920s, although their modern types were received in the late 1940s and early 1950s. Cuckoo and Mahogany varieties with the normal body size/weight were also bred in Germany.

HISTORY

At the end of the 18th and during the 19th century, the breed was widespread in Russia. For the first time it was presented at the 1st Moscow Society of Poultry Fanciers Show in 1881. Subsequently, they were exhibited annually at all major poultry shows where Orloff breeders received gold and silver medals for their birds. (Figure 3a, 3b and 4)



Fig. 3a

Fig. 3b

Fig. 4

Figure 3. A medal of the Imperial Russian Society of Poultry Breeding: (a) the obverse, (b) the reverse. Source: Yu. Dmitriev's archives. Figure 4. A medal of the Moscow Society of Poultry Fanciers, the obverse. Source: Yu. Dmitriev's archives.

The Moscow Society of Poultry Fanciers was established in 1880, and the Imperial Russian Society of Poultry Breeding in 1885. Apart from these two societies, other organizations were founded, that contributed to the development of poultry farming in Russia.

Orloff chickens were also a success at the international exhibitions in Milan (1906), Turin (1911) and, subsequently, in other cities and countries where their

breeders also have been awarded gold and silver medals. Few examples of Orloff chicken reared at that time in Russia are presented in the "Album of Husbandry Poultry Breeds". (Fig. 5 and 6)

Figure 5. A pair of Red Orloff chickens. Source: "Album of Husbandry Poultry Breeds", 1905.

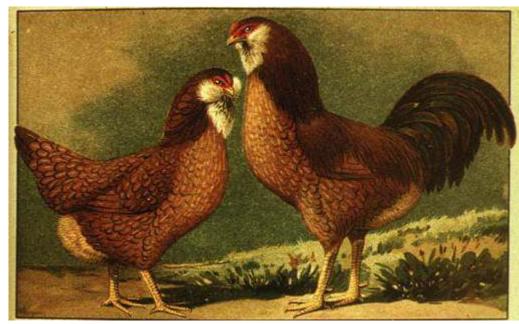




Figure 6. A pair of Spangled Orloff chickens. Source: "Album of Husbandry Poultry Breeds", 1905.

Below: Figure 7. A White Orloff cock on a postcard issued by the Imperial Russian Society of Poultry Breeding.



The White Orloff is a very rare and beautiful variety produced for the first time in Russia (Figure 7). These chickens were presented at the 13th Moscow Society of Poultry Fanciers Show in 1887 by a well-known poultry breeder Mr. S. N. Khudyakov, the variety being the pride and decoration of his chicken collection.

In 1884, specimens of the Orloff breed were imported in Germany but did not get any spread there. Only after its exportation in 1910, the breed was further developed following the liking of German fanciers. Around 1900, Orloff chickens also reached England. The American Poultry Association included the breed in its earlier Standard of Perfection but the breed was designated in the United States under the name of "Russians" (Lewis, 2011).

THE CURRENT STATE

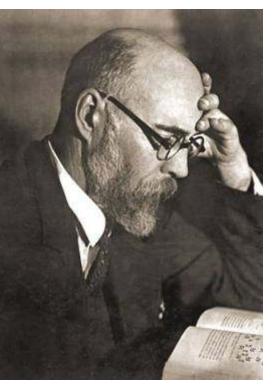
At present, Orloffs are bred in a number of countries, in some cases, exportation from Russia to certain countries have been done repeatedly, as originally imported individuals did not always meet expectations of local breeders or did not survive.

The golden age of Orloffs in Russia occurred into 1870s-1880s. At that time, they were large birds weighing approximately 4.4 kg (males) and 2.8-3.2 kg (females). Reportedly, cocks could even pick the crumbs from the table because of their height.

A proud appearance of the Orloffs, full of self-esteem, the cocks behaving with unshakeable confidence that they are the most important in the World and the gorgeous decorations on the bird head aroused overall admiration of poultry show visitors, among whom there were members of the Russian Royal family.

Not without reason several outstanding representatives of the breed, as a sign of respect to them, were given by A. Batashev, a prominent Orloff fancier, the names of "Fine Fellow", "Russian Beauty", "Glory", and "Suvorov" (a famous Russian commander). In those days, such fanciers as M. Avrakhov, A. Batashev, I. Rudnev, R. Grechikhin and others made a noticeable contribution to the development of the Orloff breed. However, by the end of the 19th century

fascination with foreign chicken breeds in Russia had led to the fact that Orloff chickens became a rarity.



At the beginning of the 20th century, studies on the genetics of morphological characteristics of the Orloff and other chicken breeds as well as crossbreds with Orloffs were conducted under the direction of the well-known Russian geneticist A.S. Serebrovsky (Figure 8). The results of these studies were given in the proceedings of Anicov station "Genetics of Domestic Fowl", 1926. Up to date, this compendium still represents unsurpassed work on the genetics of the Orloff breed with regard to the coverage of research material and number of investigated traits (Moiseyeva et al., 2012). In particular, the Serebrovsky's research group studied features of inheritance for 41 morphological characters found in this breed. There are 31 figures of several breeds and crossbreds presented in Genetics of Domestic Fowl, some of them being reproduced in this paper. The originals of these drawings made in colour by the artists A.N. Martynov and N.N. L'vova are stored at the Vavilov Institute of General Genetics, Russian Academy of Science.

Figure 8. A.S. Serebrovsky (1892-1946).

Unfortunately, historical cataclysms in Russia until the mid 20th century including Russo-Japanese War, three revolutions, Russian Civil War, two World Wars and subsequent changes in the way of inhabitants' life and its social composition, led to a sharp reduction of the numbers of Orloff chickens in the country. Fanciers even believed that the standard of the Orloff chickens of the original type had not been persisted. But few specimens of mounted Orloff chicken (dated 1885) of the already mentioned breeder A. Batashev are kept in the State Darwin Museum, Moscow. There are also a mounted Spangled Orloff cock in the Zoological Museum (St. Petersburg) and a mounted Red Orloff hen in the Agricultural Institute (Pushkin near St. Petersburg). Due to efforts of poultry fanciers the Orloff breed is gradually recovering. In the last decades of the past century a great contribution to the restoration of the breed was made by such enthusiasts of Orloff chickens as

A. Aminiev, M. Vinokurov, M. Babushkin, A. Blystanov, I. Okonechnikov, B. Antonichev. S. Monakhov and others. After his travel to East Germany, A. Blystanov, who was a great fan of domestic animals and birds, with preference to Russian breeds, brought the Orloff chicken of German type to the Soviet Union.

Today, Orloff chickens are reared at the collection farm of the All-Russian Poultry Research and Technological Institute (by A. Sevastyanova and A. Alexandrov) and All-Russian Research Institute of Genetics and Breeding of Agricultural Animals (by A. Vahrameev) as well as at private farms owned by A. Nikishin, Yu. Dmitriev, A. Esitashvili, S. Rodionov and others.

> Right: An Orloff cock. Photo and breeder: Yu. Dmitriev, Latvia.



The Red Orloff and Spangled Orloff varieties currently existing in Russia belong to Russian and German types or are mixture of both types; recently, they are most often a mixture of both types. Nowadays the estimated number of Orloffs is about 2000 birds.

CHARACTERISTICS OF THE ORLOFF BREED OF RUSSIAN TYPE

General appearance

The breed has the appearance of the Game type but it has not been used like one. This ornamental breed looks very attractive, medium-sized, with the horizontal (old type) or semi-vertical (new type) position of the body (Figure 9), broad shoulders, strong skeleton, well-developed muscles, elevated posture, long neck and head decorated with the beard and muffs (Figure 10).

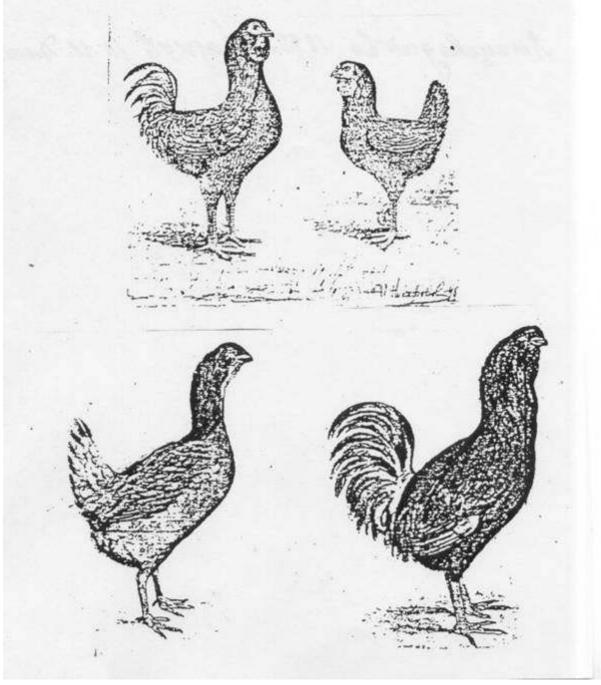


Figure 9. Orloff chickens of the old (at the top) and the new types (at the bottom). Source: "Poultry Breeding. 1993. №7.



Figure 10. A pair of Spangled Orloff. Photo and breeder: Yu. Dmitriev, Latvia.

Cock description

Head: Medium size, with a very wide frontal bone, resembles the head of prey birds. The top of the head is slightly convex and rounded; the back of the head is flat and descends steeply, forming an inward curve where it joins the upper part of the neck.

Beak: Short, thick, massive at the base, abruptly bent unlikely in any other breed, yellow colour.

Comb: Walnut, resembles a raspberry bisected along the long axis, covered with small tubercles and small feathers growing between them. The comb is located low on the anterior part of the frontal bone and closer to the nostrils.

Eyes: Bright, being amber to red by colour. Eye brow ridges are strongly developed.

Face: Red and smooth.

Ear lobes: Very small, red, covered with feathers.

Wattles: Small-sized, red, covered with feathers.

Beard and muffs: Full, extending around in a curve to the back of the eyes; beard preferably, wedge-shaped, heavy under the beak.

Neck: Long, straight set.

Hackle: Abundant but does not reach the shoulders. The top of the neck is very thickly feathered.

Back: Medium size, flat or slightly convex, straight, broad in the shoulders, narrows down to the tail.

Breast: Broad, rounded, slightly convex with feathers carried close to body. Body: Medium size and broad.

Abdomen: Moderately developed, including fluff.

Wings: Medium length, tightly pressed to the sides. The shoulders are greatly protruding.

Tail: Medium size, full, nicely spread, but not long, forms a right angle with the back.

Tail feathers: Short, thin, narrow, spreading to the sides, sharply bent.

The upper sickles: Slightly above the rest of the tail feathers.

Lower thighs: Clearly distinguished, covered with firm feathers.

Shanks: Medium length, thick, not feathered, with shiny, smooth scales, yellow. Toes: Four, yellow.

Plumage: Hard, lustrous.

Hen description

Breed features of the hen are similar to the features of the cock, except those, which are due to sexual differences.

The size of the hen's beard varies greatly.

Ear-lobes and wattles: Hardly developed and fully covered by muffs and beard.

Abdomen and fluff: More fully developed, than in the male.

Comb: Poorly developed.

Body: Longer and not as wide as in the male.

Wings: Appear shorter due to the greater development of the abdomen and fluff. Tail: Not so upright set, closed.

PLUMAGE COLOUR OF ORLOFF RUSSIAN TYPE CHICKENS

The Black-Breasted Red Orloff

Cock description (see Figure in the header).

Head, neck, shoulders, back and saddle: Lustrous, reddish-brown colour.

Beard and muffs: Preferably are pure white. Sometimes you can find dusty-white, light-grey, light-brown, white with rare black and brown feathers.

Breast and abdomen: Black.

Wings: Dark-brown with black transversal bar with green sheen.

Tail: Black with green sheen, the tail feathers are often white laced. Few white feathers are located at the base of the tail.

Hen description

Head, neck, back, breast, abdomen and lower thighs: Reddish-brown. Beard and muffs: Similar as in the male.

The Brown-Breasted Red Orloff

Cock description

Head, neck, shoulders, back and saddle: Lustrous, light-red.

Beard and muffs: As in the previous variety. Breast, abdomen, lower thigh: Light brown. Tail: Black, with green sheen.

Down feathers: Light-brown.

Hen description

Head, neck, back, breast, abdomen, lower thighs: Light-brown.

Beard and muffs: As in the previous variety. Tail: Light-brown with shading into black. Down feathers: Light-brown.

Figure 12. A Spangled Orloff cock. Photo and breeder A. Blystanov, Russia.

The Spangled Orloff

Cock description (Figure 12).

Head, neck, shoulders, back and saddle: Lustrous, red-brown.

Beard and muffs: Pure white or light-grey with brown and white feathers, turning into white at the edges. A small amount of red feathers is allowed.



Breast and abdomen: Black with small white markings at the end of the feathers. It is allowed a few amount of red-brown feathers.

Wings: Brown, with a few (no more than three) white flight feathers. The wing bar is black with a greenish sheen.

Tail: Black with greenish sheen and sickles white laced. Some white feathers are present in the tail and saddle.



Figure 13. A mounted Spangled Orloff hen in the State Darwin Museum, Moscow, Russia. Photo: A. Nikiforov.

Hen description (Figure 13) Plumage colour: Brown or light brown. It is considered, that Spangled Orloff hens should attend three colours: first red, then black and white. The hens which have double laced feathers regularly located over the body are especially attractive (Figure 14).

Beard and muffs: Well developed, preferably of pure white colour. Some birds have such a large beard that it resembles a children's breastplate, giving the hen an elegant and unique appearance.

Figure 14. A Spangled Orloff hen. Source: "Genetics of Domestic FowI", 1926.

The Mottled Orloff (red and white)

Cock description

Head, neck, shoulders, back and saddle: Red-brown with white markings on the each of the feathers.

Beard and muffs: Light-grey with white spots.

Breast and abdomen: Black with white markings.

Wings: Brown with white markings on the flight



feathers and shiny black bar across the middle of the wing. Tail: Black with greenish sheen and white markings at the feather tips. *Hen description*

Plumage: Brown with white spots all over the body. Beard and muffs: Similar as in the male.

The White Orloff

The bird has a pure white plumage. In combination with bright red comb and yellow shanks it looks extraordinarily beautiful and is the pride of the collection of those fanciers, who possess it (Figure 15).

Figure 15. An White Orloff cock. Photo and breeder: A. Blystanov, Russia.

DISQUALIFICATIONS OF THE ORLOFF BREED



Short height; not the game type; poorly developed body; narrow breast; not red ear lobes; whitish colour of eyes; poorly developed beard, muffs and neck hackle; weakly curved (not hooked), not yellow beak; other than walnut comb; roach and crooked back; not upright set tail; not the semi-vertical setting of cock body; lower thighs pressed to the body; short legs and shanks; shanks not yellow. The spangled chickens having black beard and muffs.

ECONOMIC QUALITIES

Despite the fact that Orloff chickens were created as ornamental breed, selection of them was carried for meat and egg production simultaneously. The weight of the cock is on average 3,5 kg, hens – 2,5- 3 kg. Egg production – 160 -180 eggs per year. Orloff hen begins to lay eggs in the spring of somewhat later than other breeds but continuing laying them to the late autumn. The average egg weight - 58 g. The shell of the egg is white with a grayish tint. Orloff chicken produces a lot of fine meat especially on the breast which is not accumulated fat.

Chicks hatch hardy and viable. They grow very slowly up to the age of two months, but subsequently they grow faster. Chick feathering is going slowly.



they grow faster. Chick feathering is going slowly. However, during the last 50 years some populations were created with fast feathering. Chickens reach sexual maturity late.

Grown-up roosters and hens endure frost good, their combs do not get frostbite and may be kept in not heated poultry houses. The instinct of incubation is partly preserved. Hens are good and caring mothers. Orloffs are unpretentious concerning feed, they consume a lot of juicy green fodder. The temper is pugnacious, conflict (according to the old sources), today fanciers often praise their calm temperament.

Figure 16. An F_2 crossbred hen (\bigcirc Pavlov $\times \bigcirc$ Spangled Orloff). Source: Genetics of Domestic FowI, 1926.

BREEDING VALUE

In the end of 19th and beginning of 20th centuries Orloff cocks were often used to improve the peasant poultry. However, the gene pool of the breed still is not used to a sufficient extent: in addition to the pure breeding, Orloff chickens can be used for the creation of new forms by crossing. It is confirmed by the experiments of A.S. Serebrovsky (Figures 16, 17, 18). New forms received during these experiments can be considered as the initial stage of new breeds with valuable properties and beautiful appearance.



The breed has a wide genetic diversity, which on the one hand contributes to the maintenance of the viability, resistance to diseases and is a source of unique genes, on the other hand, it suggests that the breed is not genetically stable in different populations.



Figure 17. An F_1 crossbred hen (\circlearrowleft Houdan $\times \bigcirc$ Spangled Orloff). Source: Genetics of Domestic Fowl, 1926.

Figure 18. An F_1 crossbred cock (\Diamond Red Orloff $\times \bigcirc$ Barred Plymouth Rock). Source: Genetics of Domestic Fowl, 1926.



The latter statement has been confirmed by the practice of breeding which is not always producing sustainable results in respect of the bird's exterior appearance (phenotype).

Figure 19. A Spangled Orloff cock at the Poultry Show of Orloff breed of Russian type, 2010, Photo and breeder: A. Nikishin, Russia.

FACTORS THAT IMPEDE THE PRESERVATION OF THE BREED

Late feathering of chicks, slow growth, susceptibility to diseases at an early age, occasionally crooked beak are considerable difficulties in the breeding of the Orloff chicken. The most beautiful variety of the breed – Spangled is quite difficult to keep and maintain, because this plumage pattern fully manifests itself only at the age of two and has a complex character of inheritance. Hence, it is clear, that the breeding of this breed requires extensive experience, skill, patience and time.



Nevertheless, Orloff chickens are very popular in Russia (Figures 19, 20). Due to its attractive appearance, delicate plumage pattern some artists repeatedly depicted them in paintings and drawings (Figures 21, 22 a, 22 b).

Figure 20. A pair of Spangled Orloff hens at the Poultry Show of Orloff breed of Russian type. 2008. Photo: I. Moiseyeva, Russia.

Figure 21. (Below) A group of Spangled Orloff chickens, drawing by A. Jebel, Latvia. Source: Yu. Dmitriev's archives.

Figure 22. (next page) A couple of Spangled Orloff chickens: (a) a hen (b) a cock, drawing by B. Antonuchev, 1995, Russia.



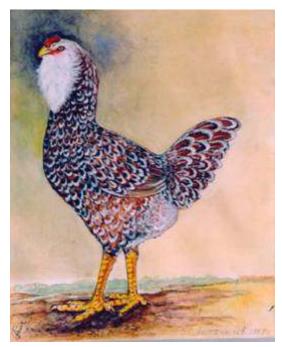


Fig. 22a

Fig. 22b

At this moment we would like to make some digression from the main topic. Breeds of the Russian breeding are often very beautiful. These include Orloff trotters, Borzoi dog (Russian wolfhound), even the Yaroslavl cattle is not just an ordinary cow, it has the fashionable large white glasses on black background! The Orloff breed of chicken, especially Spangled varieties also correspond to that list. It was created for fun and joy! In those days there were no radio, cinematography, TV, not even a computer and the Internet! Nevertheless people tried to

life enrich their bv creating beautiful breeds, decorated their houses with wood-carving and so on. Folk art was developed on very high level, for example, wooden and clay toys, figurines, weaving of lace, embroidery, painted plates and many other things. In many cases favorite images are domestic fowl.

Figure 23, above: Toywhistles. I. Moiseyeva's collection. Figure 24, right: The knitted rooster of Orloff breed made by I. Moiseyeva.



of Orloff breed made by I. Moiseyeva.

Unfortunately, the role of folk arts is sharply minimized due to the development of technological progress, old craftsmen and specialists in Orloff breed passed away. Newcomers live in another epoch. Thorough selection work for the conservation of the Orloff chicken becomes very often unprofitable from the point of commercial interests. However, we still have a number of qualified poultry fanciers and researchers who consider it their duty to promote the conservation of domestic animals of the Russian breeding.



It is necessary to explain to the readers of the magazine "Aviculture Europe" that in the Russian language the word «fancier» has a very different root than it has in English. It comes from the word "love". Our poultry fanciers love their birds very much and try to preserve hem for future generations of people. Involvement scientific researches in the field of genetics to this problem, observations of practitioner breeders in respect of poultry selection, developing projects on creation of reserves of farm animals put the solution of this problem at new level and would help save our breeding achievements, as a cultural heritage of the peoples of Russia.

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