

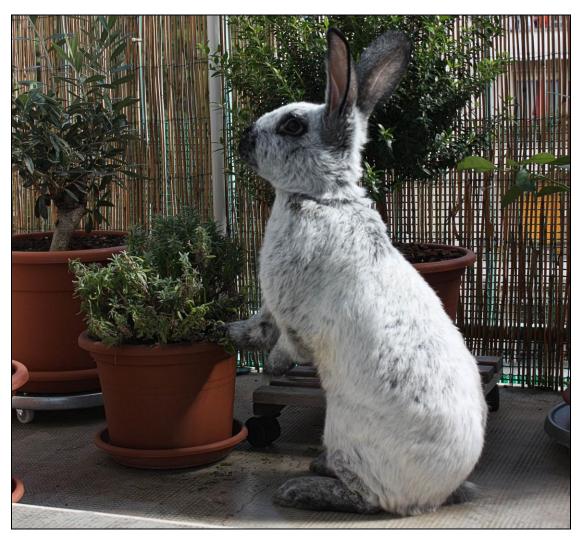
# History of the rabbit "Le Riche" that has become the Champagne Silver

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"The biggest small rabbit with the beauty of a king », description given by a president of the US association of rabbit breeders for the silver rabbit of Champagne. A rich history, that of the "Le Riche" rabbit with the silver coat.

A magnificent story, that of the "Le Riche" (the Rich) rabbit with the silver coat (Figures 1, 2). The rabbit "Le Riche" belongs to a very old breed, little domesticated,

whose particular silver coat is described in the 16th century already in France and in England. This breed could be even older, bred by monks in the monasteries of the



**<u>Figure 1</u>**: Benny, a Swiss type Champagne silver rabbit.

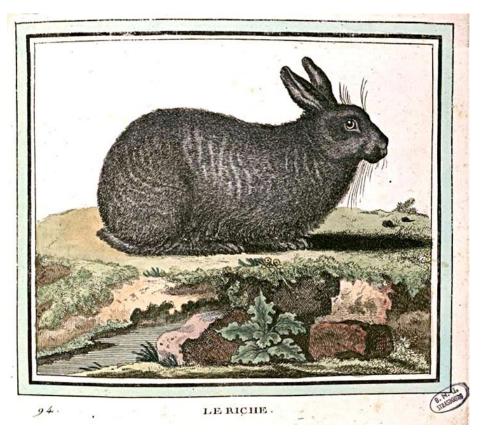


Figure 2: Le Riche rabbit, ancestor of the Champagne Silver.

Champagne region (France). Other legends state that this rabbit may come from the Himalaya Mountains and would have been imported into these France and England thanks to trade between Asia and Europe. Other sources mention the appearance of silver rabbits in colonies of wild rabbits as a result of a mutation. Domesticated, the silver rabbit is one of the oldest breeds of domestic rabbits, the other being the Angora.

Silver-coated rabbits with black heads and ears were bred in semi-liberty, in burrows during the 16th century. They were selected to obtain a coat characterized by white hairs devoid of pigments covering gray, slate-gray or black undercoat hairs. In 1631, Gervaise Markram (UK) states that "the skins that are most valued are those that have an equal mixture of black and white hairs, the black being rather dominant (Figure 3). Their skins are worth two

shillings, while those of the others are worth two or three pence.

In France, the silver rabbit is described in the 1765 edition of "Encyclopédie des Sciences" under the name "Le Riche" (Figure 2). In 1868, the English naturalist and founder of the evolutionist theory Charles Robert Darwin (1809-82) also mentions the existence of silver rabbits. He describes the evolution of the silvering of the coat in the rabbits born all black (Figures 4, 5), as well as their breeding and their selection with many details.

Over the centuries, changes in the conformation of the body, weight and coat of the Riche rabbit are observed. It is the result of a natural selection in the warrens and, later, of individual and controlled breeding in the hutches.

### **Different types of Silver rabbits**

Four varieties of Silver rabbits have been described in England and France during the 19th century. They present differences in body shape and pigmentation of the coat. In France, two varieties are mentioned in the 18th century rabbit books: a small silver rabbit with dark fur and a large Champagne Silver rabbit with a light "old silver" colored coat.

In 1854, Mariot-Didieux specifies that rabbits with a light colored silver coat are in great demand by furriers. "They make with their skins furs and especially muffs that are

sought after. They are often sold under the name of "petit gris". Their skin is worth 1.50 to 2 francs per piece." In the commune of Troyes, located in the Alsace-Champagne-Ardenne-Lorraine region, breeders and furriers favor the bigger sized silver rabbit, the Silver of Champagne. The best skins were indicated by the expression "avoir de belles riches" (to have beautiful rich), in reference to its ancestor, Le Riche. In England the silver rabbit that comes from the Riche is smaller than the French type, with a very rounded and stocky body type. The hair is thin and elastic, which affects the brightness of the white tips, which appear gray.

The different varieties are characterized by pale or dark hues of the coat, respectively called "Chinchilla" and "Millers" in England (Figure 3). The name Chinchilla is fully unrelated to the current breed of rabbit of the same name. Over the centuries, the body shape of these muscular rabbits has been greatly improved and the quality of the coat and its silvering has been perfected.

The demand for silver fur decreased drastically with the advent of synthetic fibers and acryl in 1950. Acrylic fibers started to replace rabbit fur. As they are resistant, they wear less quickly than natural fibers. Breeders then selected the breed to become a fast growing rabbit. As a result, the young animals reach a weight of about 2 kilos at the age of 2 months.

### Silvering of the fur

Silvering of the coat is determined by the Si (Silver) gene in rabbits. The Champagne Silver rabbit has the "silver" gene "si", but it is incomplete recessive. "Sisi" heterozygote rabbits will have white hairs in their coat.



**<u>Figure 3</u>**: English type Silver rabbit.

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Homozygous "sisi" rabbits will develop a silver colored coat. It is possible that other genes and factors influence the expression of the silver gene in Champagne Silver.

The silvering of the coat is done in successive temporary steps. The silver rabbits of Champagne are born all black thanks to the production of eumelanin (black pigment) in primary and secondary guard hairs and in the undercoat (Figures 4, 5). Silvering appears only with the growth of the juvenile coat, at the age of 2 months (Figure 5). At this stage, melanocytes present in hair follicles die and the secondary guard hairs become depigmented or white. The primary guard hairs are either white or black. The first signs of silvering appear in various regions of the body, usually on the belly, and go up towards the back and the face. Nevertheless, the molting pattern and the appearance of silvering on the face and body are unique to each individual. During this period, the young

rabbit seems to wear a mask on its face.

Around 3-4 months, the coat changes again. The undercoat presents a variation of color. Light-colored at its base, the hair takes a slate-dark/blue shade, with a blackish delimitation. Primary and secondary guard hairs are mainly white, with black hairs at regular intervals (Figure 5, 6). Silvering of the coat is final around 6 to 8 months. Silvering remains limited around the nasal area, around the eyes, ears, digits and tail. Sometimes an individual can develop regions with white fur on its body.

In adulthood, the coat is dense and full, and soft to the touch. In addition to its bluish-white color with black tipped guard hairs distributed at about 5 per cm<sup>2</sup>, the uniformity of silvering is the characteristic of this breed *par excellence*. It must be even and uniform on all visible parts of the body with the exception of the tips of the limbs, muzzle and ears.



**Figure 4:** Swiss type Champagne Silver doe and her offspring (including Benny)

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**<u>Figure 5</u>**: Development of the silvering in the young Champagne silver male rabbit Nouky.



**<u>Figure 5 (continuation)</u>**: Development of the silvering in the young Champagne silver male rabbit Nouky.

In this breed, attention should be paid to the edge of the ear pinnae, which may have isolated white hairs but should not be mixed. The various standards systematically indicate that the guard hairs with white tips generate the silvering.

By tearing off some hairs and guard hairs and putting them on a black paper, we notice that they are white from their basis to the tip. This misunderstanding results from the fact that the silvery white hairs act like a mirror when grouped together and take on the blue or even black sub-color of the colored undercoat hairs. The observer then feels that only the tips of these guard hairs are white while they are white from the base to the tip.

## True rabbit glory

Nowadays, the Champagne Silver is, a medium-sized French breed, with a body weight ranging ideally between 4.5 and 5.0 kg. Both color and structure of its coat and the morphology of its body are important. Indeed, it is a robust rabbit with a strong

bone structure and a strong muscular development which brings out the rotundity of its conformations as well as the harmonious and balanced form of its body. The shoulder region is muscular, but slightly narrower than the hips, when the rabbit is seen from above. The thoracic region is large and conveys an impression of strength. The hip region is wide, rounded and well-muscled. The back line is well rounded. The limbs are straight and powerful.

The ancestors of Silver Champagne rabbits had a rather black coat with few guard hairs with white depigmented tips. The silvering was unevenly distributed over the body and the intensity of the hue varied, to the displeasure of furriers who were for of hides looking batches with homogeneous hues in order to assemble them. Silvering of the coat has been greatly improved by selection over the centuries to become this light old silver colored coat over the entire body, with the exception of the ears, nose, legs and tail. The undercoat is



**Figure 6**: Coloration of the fur of Swiss type Champagne Silver rabbits, with a dark undercoat and white primary and secondary guard hairs.

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**Figure 7:** Swiss type Champagne silver, with a light colored fur with dark marks is a strong muscular rabbit, with strong limbs, and a well-rounded back.

uniformly dark slate blue in color. The guard hairs differ in two types: the majority, whose tips are white and those that are uniformly colored throughout their length. The high amount of undercoats hairs and guard hairs ensures a compact density to the coat and, as a result, a good hold and flexibility of the fur as well as softness to the touch. The amount of white guard hairs will determine the silvery character: few will result in a darker colored coat; many will lead to a light colored coat. The Champagne Silver is originally from France, but has spread to Belgium, the Netherlands and Germany. In Switzerland, selection of the Silver Champagne made it possible to obtain a muscular rabbit with thick fur, with a

lighter coat color than its French counterpart thanks to an intense under-color and a good distribution of fully colored down hair (Figures 7, 8).

When referring to the old photos of breed standards of its country of origin France, the direction of Swiss breeding is one that best corresponds to the original color of the Champagne Silver. This one is rather light, with dark marks on the muzzle, ears and paws.

In France the current color is more blue-blackish and uniform (Figure 8). Marks

like a darker tip of limbs or around the nasal region have almost disappeared. The breeding direction in Belgium is quite similar.

In Germany efforts have been made to obtain a rabbit with a very pronounced silvering, which is devoid of most dark markings. The more its color is uniform on all parts of the body and the more the individual is appreciated. Therefore, it has been called "Helle Großsilber Kaninchen" (light colored Grand Silver). Its body type is massive, quite similar to that of New Zealand rabbit as bred in Switzerland. Despite the very good level of this rabbit breed in Germany, amateur breeders



**Figure 8**: Champagne Silver rabbits belonging to the French type.

imported the Swiss type Champagne Silver in Germany. The breed is appreciated by the Germans and it tends to make its place despite the competition of the Helle Großsilber breed.

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