

Original Research Article

# Development and Genetic Characteristics of the Selkirk Rex Cats

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**Abstract:** The Selkirk Rex is one of the four curly cats and is the latest in a long line of natural breeds. Naturally occurring cat breeds, unlike those that have been bred in captivity, appear without any human involvement.

Keywords: Selkirk Re; Cat

The Selkirk Rex is the most recently established curly-coated cat breed originating from a spontaneous mutation that was discovered in the United States in 1987. The Selkirk Rex originated from a rescued cat named "Miss DePesto of Noface". (Pest for short, named after the character with curly-coated in the Allyce Beasley TV series Moonlighting) Pest was born at the Sheridan, Montana, animal shelter to an ordinary, straight- coated house cat, the only curly-coated one in a litter of six. Pest was adopted by Jeri Newman and lived with her. Jeri, a Persian breed breeder, is very interested in the genetic mutation of Pest. So when Pest became an adult, Jeri arranged for her to mate with her family's black Persian male, PhotoFinish of Deekay, and gave birth to her first litter. This included a long hair, a short straight hair and a black and white curly-coated cat named "NoFace Oscar Kowalski" (Oscar for short). Oscar had also been credited as the starting point for The Selkirk Rex lineage and used his shape as a template for The Selkirk Rex's earliest breed standards.

The next year, Jeri used inbreeding to strengthen the curly-coated genes, mating Pest with her son Oscar to produce the first litter of inbred babies.

Among them, there was a short curly-coated cat with cream point color, which also proved that Pest carried point color gene and desalting color gene.

Pest's third litter of three homozygous curly-coated and one straight was also breed with his son Oscar.

The Selkirk Rex was named by Jeri after her stepfather "Selkirk" and added a word "Rex" for all curly-coated breeds to name the breed. The Selkirk Rex was also the first cat breed to be sued name of a human.

### 1. The Selkirk Rex interbreed requirements in association

The breed was accepted by The International Cat Association (TICA) in 1992. The American Cat Fanciers Association (ACFA) in 1998, and the Cat Fanciers' Association (CFA) in 2000.

American Short hairs, Persians, Exotic Longhairs, Exotic Short hairs, and British Short hairs have been used as interbreed to develop this breed. The American Shorthair has now been discontinued as interbreed, except in The International Cat Association (TICA).

The Cat Fanciers' Association (CFA) allowed the Selkirk Rex to cross with British short hairs, Persians, Exotic short hairs, and Exotic Longhairs. In the Cat Fanciers' Association (CFA), all interbreed are scheduled to be discontinued in 01-01-2025.

The Selkirk Rex interbreed rules of the World Cat Federation (WCF) were not published.

The Universal Cat Association (UCA) allowed the Selkirk Rex to cross with British short hairs, British longhairs. In order to avoid atavism, the Universal Cat Association (UCA) was not allowed the Selkirk Rex to cross with Persians, Exotic Longhairs, Exotic Short hairs.

#### 2. The Selkirk Rex cat breed characteristics

Of the four curly-coated cat breeds, the curly-coated genes are recessive in the Devon Rex and the Cornish Rex breeds, dominant in the Laperm breeds, and only semi-dominant in the Selkirk Rex y breeds.

To put it simply, the Devon Rex and the Cornish Rex carry the recessive curly-coated genes, and the hybrid generation F1 generated by the cross with the straight curly breed is the straight hairy offspring carrying the recessive the curly-coated genes. Use F1, which carries the recessive curly, to cross with Either the Devon Rex or the Cornish Rex, and the offspring F2 are likely to be curly. Because of alleles, the offspring of a cross between a Devon Rex and a Cornish Rex are straight. Since the curly-coated

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gene is dominant, the F1 of the Laperm cat is likely to produce the curly-coated offspring after cross with the straight hair breed. The same with the Selkirk Rex.

Suppose the straight-coated gene is denoted by N and the curly-coated gene of the Selkirk Rex is denoted by SR.

Straight-coated = N/N, heterozygous = N/SR, homozygous = SR/SR.

- (1) N/N+N/SR = N/SR&N/N.
- (The offspring of straight-coated and heterozygotes are heterozygotes or straight-coated)
- (2) N/N+SR/SR = N/S
- (The offspring of straight-coated and homozygous are heterozygous.)
- (3) N/SR+N/SR = N/SR&SR/SR
- (Heterozygous and heterozygous offspring are heterozygous or homozygous)
- (4) SR/SR+SR/SR = SR/SR
- (Homozygous and homozygous offspring are homozygous)

Homozygotes are usually born with extremely sparse hair, and develop a curly coat after 3 months. Homozygous seeds have large ears, concentrated facial features, more curly hair and longer body shape, which is more similar to the shape of Pest. Heterozygotes, on the other hand, are born with curly coats, smaller ears, wider features, and slightly less curly hair than homozygotes. Heterozygotes are stronger and more compact than homozygotes, close to the shape of Oscar and more suitable for the cat show.

The Selkirk Rex is of medium to large size, with a round head, large round eyes, and medium ears with wide base. The coat is soft and fluffy on the back. The hair on the body, chin and underbelly is more curly than on other parts of the body. A nose break like the Persian cat is not allowed. The breed standards for the Selkirk Rex cats in different association almost same, all requiring a strong build, curly coat and a rounded face.

#### 3. The Selkirk Rex cats are susceptible to diseases

There are no known health problems with the Selkirk Rex cats and they are a very robust and healthy breed. Like other curly-coated breeds, curling irritates the inside of the ear and increases wax production, while trimming the hair inside the ear reduces wax production. Malassezia in the ear canal is also common in curly-coated breeds. Some of curly-coated breeds are not easy to digestion high-protein foods, so it is not recommended to choose a cat food with high protein formula. The homozygous Selkirk Rex cats are oil production and need to be grooming more frequently.

Other health problems may be inherited from hybrids, including polycystic kidney disease and hypertrophic cardiomyopathy. Responsible breeders screen cat genes to minimize their impact on the breed. In the UK, the GCCF society requires all breeds of Selkek curly cats to be tested for polycystic kidney disease.

## 4. The development of the Selkirk Rex cats in China

From 2010 to 2012, Emilycat cattery, Nuomi cattery, and Clover- Meow Cat cattery, took the lead in introducing the Selkirk Rex cats, and became the first batch of the Selkirk Rex cats breeders in China, whose breeding cats were active in various cat shows. Since 2015, more Chinese breeders have joined in, making the Selkirk Rex one of curly-coated cat breeds active in Chinese cat shows. In 2017, Three cattery, Emilycat cattery, Nuomi cattery and Clover- Meow cattery, jointly introduced Laperm cats, so that the four curly-coated breeds gathered in the Chinese cat shows.

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