

Note: the most recent updates can be found at: [Breeding Decision - Breeding Programmes Cats | Vlaanderen.be](https://vlaanderen.be/breeding-decision-breeding-programmes-cats)



## Other names and permitted crossbreeds

**Balinese, Siamese, Oriental Shorthair and Oriental Longhair** may be used in a breeding programme for Peterbalds without permission. However, offspring may never be used in a breeding programme for another breed.

## Aim of the programme

The breeding programme aims to reduce the most common hereditary disorders without excluding too many cats, in order to maintain genetic diversity within the breed population.

Instead of systematically excluding animals, we have drawn up breeding recommendations based on carefully considered combinations. The physical health of the animals is of course taken into account, and cats suffering from any of these disorders are excluded from breeding.

# Performance tests

CONDITION	RECOMMENDATION	SCREENING METHOD	AGE	FREQUENCY
Deafness	Mandatory for completely white cats (W-locus gene)	BAER test	From 6 weeks Before the first mating	One-time
Polycystic Kidney Disease (PKD)	Mandatory	Ultrasound	From 12 months	One-off
Polycystic Kidney Disease 1 (PKD 1)	Mandatory	DNA test* PKD1 variant: c.9882C>A	From birth For the <sup>1st</sup> coverage	One-off
Progressive Retinal Atrophy (PRA rdAc)	Mandatory	DNA test CEP290: c.7584+9T>G	From birth For the <sup>1st</sup> mating	One-off
Hypertrophic cardiomyopathy (HCM)	Recommended	Echocardiography	From 12 months	Valid for 2 years
Gangliosidosis, GM1	Recommended	DNA test GLB1: c.1448G>C	From birth For the <sup>1st</sup> coverage	One-time

\*For DNA testing:

**Free by descent:** when both parents of a breeding animal have been tested free of an affected or abnormal allele by means of DNA and parentage verification has shown that they are the parents, the breeding animal does not need to be tested again, but it can be assumed that the breeding animal is also free of the affected or abnormal allele in question.

## Breeding advice per performance test

Breeding advice is given here (schematically and in table form) for every possible parent combination.

- **Positive advice** or green means that this is a suitable mating based on this test.
- **Conditional positive advice** or orange means that this is not an ideal pairing based on this test, but that the pairing is permitted. Such combinations are permitted in order not to compromise the genetic diversity of a breed.
- **Breeding prohibition** or red means that this is not a suitable pairing based on this test. These animals may not be combined.

Animals with autosomal **recessive disorders** may only be used **if the welfare of the animal and its offspring is assured**.

CONDITION	POSSIBLE RESULT OF SCREENING	BREEDING ADVICE				
Deafness	BEAR test results: 1. <b>normal</b> : normal hearing in both ears 2. <b>unilateral</b> : completely deaf in one ear and normal hearing in the other ear 3. <b>bilateral</b> : completely deaf in both ears 4. <b>no result</b> : no BAER test was performed	Male	Normal hearing	Unilateral deafness	Bilateral deafness	No result
		Female cat				
		Normal hearing				
		Unilateral deafness				
		Bilateral deafness				
		No result				
Polycystic Kidney Disease (PKD)	1. <b>Normal</b> : no signs of PKD visible on ultrasound. 2. <b>Suspicious</b> : very minor abnormalities are visible on ultrasound that may be consistent with PKD. However, these are not sufficiently specific. 3. <b>Affected</b> : there are signs of PKD visible on the ultrasound scan. 4. <b>No result</b> : no ultrasound scan of the kidneys was performed.	Male	Normal	Suspicious	Affected	No result
		Female cat				
		Normal				
		Suspicious				
		Affected				
		No result				
Polycystic Kidney Disease 1 (PKD 1)	This is an autosomal dominant inheritance: 1. <b>Free</b> 2. <b>Heterozygous carrier</b> (1 normal and 1 affected gene copy) 3. <b>Homozygous carrier</b> (2 affected gene copies) 4. <b>No result</b>	Male	Free	It. Affected	Homo sexual sufferer	No result
		Female				
		Free				
		It. sufferer				
		Hom sufferer				
		No result				

CONDITION	POSSIBLE RESULT OF SCREENING	BREEDING ADVICE				
Progressive Retinal Atrophy (PRA rdAc)	This is an autosomal recessive inheritance: 1. <b>Free</b> 2. <b>Carrier</b> (1 normal and 1 affected gene copy) 3. <b>Affected</b> (2 affected gene copies) 4. <b>No result</b>	Male	Free	carrier	sufferer	No result
		Female				
		free				
		carrier				
		sufferer				
Hypertrophic cardiomyopathy (HCM)	1. <b>Normal</b> : no signs of HCM are visible on the echocardiogram. 2. <b>suspicious</b> : there are signs visible on the echocardiography that may indicate HCM. The cat must be retested after 1 year. 3. <b>Affected</b> : clear signs of HCM are visible on the echocardiogram. 4. <b>No result</b> : no echocardiography was performed.	Male cat	Normal	Suspicious	Affected	No result
		Female				
		Normal				
		Suspicious				
		Affected				
Gangliosidosis, GM1	This is an autosomal recessive inheritance: 5. <b>Free</b> 6. <b>Carrier</b> (1 normal and 1 affected gene copy) 7. <b>Affected</b> (2 affected gene copies) 8. <b>No result</b>	Male	Free	carrier	sufferer	No result
		Female				
		free				
		carrier				
		sufferer				
		No result				

# General breeding advice

The **mandatory tests** must be carried out in accordance with the specified conditions and frequency. If one or more of these results is a 'breeding ban', this combination may not be carried out.

Depending on the number of clinical examinations that may result in a **conditional positive breeding recommendation (orange)**, a maximum number of conditional positive results is permitted:

- 1-2 examinations: max. 1 conditional positive
- 3-4 examinations: max. 2 conditional positives
- 5 or more examinations: max. 3 conditional positive results

In such cases, **further follow-up** by the breeder is required before repeating such mating.

The **inbreeding coefficient** in the FBe database is calculated using Wright's formula **over 5 generations** (if known).

The inbreeding coefficient (COI) of an offspring may **be a maximum of 1% higher than the average COI of both parents**.

If **fewer than 3 generations** of the parents are known, the combination is only permitted if there are no common ancestors on both the father's and mother's side. All breeding recommendations for the mandatory tests must then be positive. A female cat may not be mated with her grandfather, her father, her brother, her half-brother, her son or her grandson.

To prevent disease-causing mutations from spreading too widely within the breed or population, it is essential not to allow a male cat to be used for breeding too often (popular sire effect). In this way, we limit the spread of harmful genetic variants and contribute to the long-term health of the breed.

**Our website:**

<http://www.felisbelgica.be/>

**Our Facebook page:**

<https://www.facebook.com/Felis-Belgica-255959984470978/>

**Our Instagram page:**

<https://instagram.com/felisbelgica>

