

## Flemish Giant Rabbit

*Oryctolagus cuniculus*

**Class:** Mammalia **Order:** Lagomorpha **Suborder:**

**Family:** Leporidae (Lagomorphs)

**Other names:** none

### Other breeds:

More than 40 breeds are recognized by the American Rabbit Breeders Association, which range from rabbits that weigh only a couple of pounds to those that weigh 20 pounds or more.

**Other Relatives:** *Oryctolagus cuniculus*-European rabbit

## Zoo Rabbits 1.1

Sunny 0.1 – female, B: 7/17/2009, Aq: 11/10/2009

About Sunny

Sunny (white fur) came from Utica Zoo (Dam: Ravenclaw, Sire: Jagger), weighs 10 lb. 12 oz.

## Status

Domesticated - not evaluated. They're a very popular breed today.

## Original Range & Habitat

Habitat includes dry areas near sea level with soft, sandy soil for easy burrowing. Brushy fields are preferred for the cover they provide, but forests are also inhabited. Domesticated species are found worldwide.

Domestic Flemish giants are kept as pets or for fur or meat production. Originally bred in Belgium.

## Characteristics

**Size:** Up to 2.5' in length [1]; Average weight: 15 lbs. [1]

**Longevity: Wild: Captivity:** 8-10 years [1]

## Physical Description

- Most notable about these rabbits is their large size for which they were bred.
- They also have a considerable amount of thick fur, which was useful in their native climate in Belgium.
- There are seven different colors: black, fawn, light gray, sandy, steel gray and white.
- Large ears and eyes would help them detect predators in the wild
- Their eyes are limited in terms of depth perception and close-up vision. Instead, the rabbit's vision system is designed to pick up any kind of movement at a far distance [2].
- Their body shape is semi-arched and referred to as "mandolin" because in its natural resting pose it resembles the shape of the musical instrument. [2]
- Lagomorphs differ from rodents in that they have four incisors in the upper jaw (not two, as in the Rodentia), however, they resemble rodents in that their incisor teeth grow continuously throughout their lives, thus necessitating constant chewing on fibrous food to prevent the teeth from growing too long [3].

## Dimorphism:

**Males:** Typically larger than females and have broader heads. Can weigh up to 22lbs [1]

**Females:** Females have a large **dewlap**, or skin fold underneath the neck, which is used to keep her offspring, called kits, warm. Females can weigh up to 20lbs [1]

## Diet: Herbivore

Lagomorphs are almost strictly herbivorous, unlike rodents, many of which will eat both meat and vegetable matter [3].

**Diet in the Wild:** Rabbits and rodents share similar diets and body structures. A rabbits' diet contains harsh roughage, such as hay and grass, so their teeth have adapted to continuously grow, similar to rodents.

**Diet in the Zoo:** apple, carrots, leafy greens, hay, and pelleted grains

## Behavior

- *Diurnal*, day active & *Crepuscular*, dawn and dusk [2]



- Flemish Giants are very docile, leading them to be a popular choice for pets or livestock.

### Feeding Behavior

- Rabbits are unable to absorb all of their nutrition via the intestinal wall, but can still get it by eating their cecals (or **cecotropes**). (These are not the same as feces, which are round dry droppings seen around the rabbit's territory and in the litter box.) This behavior is called **cecotrophy**.
- Cecotropes are often not seen by humans because they're taken straight from the anus, but they look like dark small mushy blobs. Baby rabbits eat their mother's cecals as well as drink her milk. Rabbits will redigest their droppings as much as 12 times for remaining nutrients.

### Defense Mechanisms

- Wild rabbits will jump sideways to break their scent trail to evade predators [1]

### Social Structure & Communication

- The male rabbit is called a buck, the female is a doe, and babies are called kits. A group of rabbits is a warren. [2]
- Rabbits have scent glands under their chin and will rub their scent glands on almost everything in order to claim ownership and mark territory [2].
- Though generally silent, rabbits are capable of making loud screams when frightened or injured [4].
- They communicate with each other through scent cues and touch, and thump their hindlimbs on the ground to warn of danger [4].

### Reproduction

- Rabbits are well-known for their reproductive capacity. They are capable of reproducing year-round, but most breeding activity takes place in the first half of the year. One reason for the high reproductive success of rabbits is **induced ovulation**, where eggs are only released in response to copulation.
- Females experience postpartum estrus and thus may have several litters per year.
- **Altricial** newborns are naked, blind and helpless. In the wild, the mother visits the nest for only a few minutes each day to nurse them, but the milk is extremely rich. They are weaned at four weeks and attain sexual maturity at about eight months. Males take no part in the care of the young.
- Large litters of 5 to 12 rabbits [1]
- Gestation period of about a month [1]

### Domestication

- Flemish Giants are a very old breed of domesticated rabbit. Originally raised for meat and fur, the breed already existed in Belgium by the 16th century. The first standards for the breed were written in 1893 [4]

### Conservation

- **Use & Trade**
  - Flemish Giants are still prized for their meat and for their fur, but are also often bred today as companion animals. They are known as the "Gentle Giants" of the rabbit world, and are regarded as wonderful pets. If treated correctly, they are very docile and gentle even with small children. Many people also raise Flemish Giants to show. Because of their size, these rabbits need a fairly large space in which to roam, but they can be litter-boxed trained which means that they can also be allowed to roam freely indoors. [4]
  - Old World rabbits represent one of the most economically important mammal species [4].
- **Threats**
  - Few mammal species are farther from extinction than *O. cuniculus* [4]. In fact, feral populations of rabbits are invasive all over the world.
  - *Oryctolagus cuniculus* has been highly successful in most places where it has been introduced, and it is considered an agricultural pest in many areas (especially where its natural predators have been eliminated) [4].
- **Predators**
  - Wild rabbits serve as an important food source for a variety of predators, including hawks, owls, foxes, weasels and coyotes [1]

### Did you know?/Fun Facts

- Rabbits are lagomorphs, not rodents. Lagomorphs consist of rabbits, hares and pika.
- The Flemish giant is just of about 40 breeds of *Oryctolagus cuniculus*, the ancestor of all domestic rabbits. The breeds vary tremendously in size, fur type, coloration and general appearance.
- This breed of rabbit is the second oldest in the United States; the oldest is the Belgian Hare

## Glossary

**Altricial** - hatched or born in an undeveloped state and requiring care and feeding by the parents.

**Dewlap** - A dewlap is a longitudinal flap of skin that hangs beneath the lower jaw or neck of many vertebrates.

**Cecotropes**- also called 'night feces' or 'soft feces,' are the material resulting from the fermentation of food in a part of the digestive system[3]. This material is rich in protein, usually softer than normal feces and also contains high levels of vitamins K and B. Cecotropes are formed by reverse peristalsis within the cecum and are passed during resting periods.

**Cecotrophy** - normal behavior of rabbits to eat their own feces. This behavior is a source of nutrition, primarily vitamins and minerals from partially digested plant material

**Induced ovulation** - is when a female animal ovulates due to an externally derived stimulus during, or just prior, to mating, rather than ovulating cyclically or spontaneously. Stimuli causing induced ovulation include the physical act of coitus or mechanical stimulation simulating this, sperm and pheromones.

## References

[1] Maryland Zoo, "Flemish Giant Rabbit Fact Sheet: *Oryctolagus cuniculus*," Maryland Zoo, 2015. [Online]. Available: <http://www.marylandzoo.org/assets/Flemish-Giant-Rabbit-Fact-Sheet.pdf>. [Accessed January 2015].

[2] Peoria Zoo, "Giant Flemish Rabbit - *Oryctolagus cuniculus*," Peoria Zoo, 2015. [Online]. Available: <http://www.peoriazoo.org/animal-groups/mammals/giant-flemish-rabbit/>. [Accessed January 2015].

[3] Wikipedia, "Lagomorpha," Wikipedia, 2015. [Online]. Available: <http://en.wikipedia.org/wiki/Lagomorpha>. [Accessed January 2015].

[4] A. Tislerics, "*Oryctolagus cuniculus*," Animal Diversity Web, 2000. [Online]. Available: [http://animaldiversity.org/accounts/Oryctolagus\\_cuniculus/](http://animaldiversity.org/accounts/Oryctolagus_cuniculus/). [Accessed January 2015].

[5] Maryland Zoo, "Flemish Giant Rabbit - *Oryctolagus cuniculus*," Maryland Zoo, 2015. [Online]. Available: <http://www.marylandzoo.org/animals-conservation/mammals/flemish-giant-rabbit/>. [Accessed January 2015].