

Domestic Ferret

Mustela putorius furo

Class: Mammalia **Order:** Carnivora **Family:** Mustelidae
(badgers, otters, weasels and relatives)

Other names: none

Other subspecies:

Other Relatives: It is thought that ferrets may have been domesticated from native European polecats (*Mustela putorius*). There is evidence of domestic ferrets in Europe over 2500 years ago. [1]



Martha

Zoo Ferrets 1.1

'Martha' 0.1 – female, DOB: Jan 1, 2011, AQ: 8/10/2012

'Freddy' 1.0 – male, DOB: approx.. Jan 2013, AQ: 2/6/2016

About Martha and Freddy

Martha was a relinquished pet and weighs 1lb 11 oz. Freddy was found by a good samaritan in a parking lot and turned into Mercer County Wildlife Center before coming to the Zoo.

Status

Domesticated – not evaluated

Geographic Region

Not much is known about where domesticated ferrets originated. It is thought that they have been domesticated from native European polecats (*Mustela putorius*). There is evidence of domestic ferrets in Europe over 2500 years ago. Currently domestic ferrets are found around the world in homes as pets. [1]

Habitat

Domestic ferrets are kept as pets or as working animals in human habitations [1].

Characteristics

Size: *Average length:* 12.99-15.98” (head to base of tail) [1]; *Average weight range:* 0.66 – 5.95 lbs. [1]

Longevity: Wild Due to domestication, domestic ferrets will not survive long in the wild. **Captivity:** 6-10 years* [1]

* There are a few diseases and disorders that can shorten the life of domestic ferrets if not treated.

Physical Description

- Domestic ferrets have been bred for a large variety of fur colors and patterns. The seven common fur colors are called: sable, silver, black sable, albino, dark-eyed white, cinnamon, and chocolate. The most common of these colors is sable [1].
- Domestic ferrets have a long and slender body. They are capable of bending their spine in half horizontally, allowing them to turn around in tight quarters, such as rabbit dens.
- Ferrets have scent glands near their anus, the secretions from which are used in scent marking [2].
- Average tail length is 7.6 to 10 cm [1].
- Domestic ferrets have large canine teeth and 34 teeth total [1].
- Each paw has a set of five, non-retractable claws [1].

Dimorphism Domestic ferrets exhibit sexual dimorphism.

Males: Male domestic ferrets can weigh from 0.9 to 2.7 kg, neutered males often weigh less than unaltered males. Males are 38 to 40.6 cm long [1].

Females: A typical female domestic ferret weighs from 0.3 to 1.1 kg. Females are typically 33 to 35.5 cm long [1].

Diet: Carnivore

Diet in the Wild: Domestic ferrets fed a meat-like diet, similar to that of domestic canines. If they were in the wild, they would get nutrients from eating all parts of an animal, such as the liver, heart, and other organs.

Diet in the Zoo: Mixture of dry cat food and ferret food

Behavior

- *Crepuscular*; A healthy domestic ferret will often sleep 18-20 hours per day.
- They will often change this activity period depending on when their owner is around to give them attention.

Feeding Behavior

- Ferrets are **obligate carnivores**; ferret digestive tracts lack a **cecum** and the animal is largely unable to digest plant matter [2].
- The natural diet of their wild ancestors consisted of whole small prey—i.e., meat, organs, bones, skin, feathers, and fur [2]

- Ferrets don't chew their food; instead, sharp **carnassials** cut the food into pieces and the polecat then swallows these pieces. Additionally, when grabbing prey, the lower jaw locks into the skull and prevents the jaw from dislocating during biting or from the force of the jaw muscles. [3]

Social Structure & Communication

- Like many other mustelids, ferrets have scent glands near their anus, the secretions from which are used in scent marking. Ferrets can recognize individuals from these anal gland secretions, as well as the sex of unfamiliar individuals. Ferrets may also use urine marking for sex and individual recognition [2].
- Domestic ferrets are playful and socially demanding. Domestic ferrets use a variety of body language.
- Some of these behaviors are dancing, wrestling, and stalking. They will *'dance'* when they are happy and excited, hopping in every direction. This is colloquially called the 'weasel war dance.' [2]
- *Wrestling* is a behavior that includes two or more ferrets. They will roll around with each other, biting and kicking, usually in a playful manner.
- *Stalking* is sneaking up on a toy or other animal in a low crouched position.

Reproduction

- *Placental mammal*
- **Polygynous**
- Male domestic ferrets will mate with as many females as they have access to. Male domestic ferrets go into rut between December and July [1]. An increase in the oil production of the skin glands causes a yellowish, discolored undercoat.
- Females go into heat (**estrus**) between March and August, but are capable of going into lactation estrus if they have a litter smaller than 5 kits [1]. This means they can breed again while still nursing their previous litter.
- Healthy domestic ferrets can have up to three successful litters per year (**iteroparous**) with up to 15 kits [1].
- Gestation length is about 42 days. Young domestic ferrets need about eight weeks of parental care. Kits are born deaf and have their eyes closed.
- Young domestic ferrets are **altricial** at birth, and need about 8 weeks of parental care. Kits are born deaf and have their eyes closed. Newborns typically weigh about 6 to 12 grams. Baby incisors appear about 10 days after birth. The kits eyes and ears open when they are 5 weeks old. Weaning of the kits is done while they are 3-6 weeks old. At 8 weeks, kits have 4 permanent canine teeth and are capable of eating hard food [1].

Domestication

- Records of ferrets, or ferret-like animals, being used to flush rabbits from their dens, where men and dogs were ready to dispatch them, date back as far as 63 BC. Ferret-like animals were mentioned by the ancient Greeks dating back to 450 BC [4].
- Ferrets may also have been kept around households to control rodents, but the majority of references relate to ferrets and rabbits. It is clear that ferrets were used early on to hunt rabbits, both as a pest control measure and as a sport. Lighter colored ferrets are preferred because they are easier to see and retrieve after a hunt [4].
- By the early 1900's ferrets were being imported to the US by the tens of thousands to be used as "vermin" exterminators. The USDA promoted the use of ferrets for rodent control. If your farm was infested you could call the ferretmeister to come and release ferrets on your property [4].
- The ferret's anatomy and willingness to run through dark tunnels make them ideal in transporting cables through long pipes. Oilmen in the North Sea, telephone companies, camera crews and people working on airline jets have used ferrets for this purpose [4].

Conservation

- **Use & Trade:**
 - In Europe, people sometimes use ferrets for hunting, which is known as ferreting. [1] With their long, lean build, and inquisitive nature, ferrets are very well equipped for getting down holes and chasing rodents, rabbits and moles out of their burrows [2].
 - Colonies of feral ferrets have established themselves in areas where there is no competition from similarly sized predators, such as in the Shetland Islands and in remote regions in New Zealand. It has been claimed that New Zealand has the world's largest feral population of ferret-polecat hybrids [2]
 - In the 1870-80s, farmers in New Zealand demanded that ferrets be introduced into the country to control the rabbit population, which was also introduced by humans. About 3000 ferret-European polecat hybrids and stoats were turned loose. Concern was raised that these animals would eventually prey on indigenous wildlife once rabbit populations dropped, and this is exactly what happened to New Zealand's bird species which previously had had no mammalian predators [2]. The current estimate of the number of feral ferrets between the two islands is around one million [4].
 - Ferrets are an important experimental animal model for human influenza, and have been used to study the 2009 H1N1 (swine flu) virus [2].
- **Threats:** Ferrets are known to suffer from several distinct health problems. Among the most common are cancers affecting the adrenal glands, pancreas, and lymphatic system. Viral diseases include canine distemper and influenza. Health problems can occur

in unspayed females when not being used for breeding. Certain health problems have also been linked to ferrets being neutered before reaching sexual maturity. Certain colors of ferret may also carry a genetic defect known as Waardenburg syndrome. Similar to domestic cats, ferrets can also suffer from hairballs and dental problems [2].

- **Predators:** Domestic ferrets don't have any real threat from predators. Those in New Zealand that have established feral colonies have done so due to lack of larger predators on the islands. However, those released in Australia were hunted by larger predators such as fox, feral cats, dingoes and hawks, and therefore failed to establish feral colonies.

Did you know?/Fun Facts

- Like skunks, ferrets have a scent gland near their anus that release a foul smelling secretion when started. The ferrets' scents are much less powerful, however.
- When ferrets are excited, they make a clucking noise – this is called *dooking*.
- Aside from selection towards particular fur colors, domestic ferrets closely resemble their wild ancestors, European polecats (*Mustela putorius*).
- The word "ferret" comes from *furittus*, a Latin word meaning "little thief".
- The name *Mustela* is a Latin derivation of the term *mus* for mouse, *Putorius* is from the Latin *putor*, which means a stench- referring to the musky odor of the ferret [4]. Combine this with the meaning of their common name, ferret, we have a 'stinky, mouse-catching thief!'

Glossary

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

Carnassials

Cecum- part of the large intestines; in herbivores, the cecum stores food material where bacteria are able to break down plant cellulose.

Estrus- a recurring period of sexual receptivity and fertility in many female mammals; heat.

Iteroparous- offspring are produced in groups (litters, clutches, etc.) of more than one at a time and across multiple seasons (or other periods hospitable to reproduction). The term iteroparity comes from the Latin *itero*, to repeat, and *pario*, to beget.

Obligate carnivores- Sometimes called "true" carnivores, these animals depend on the nutrients only found in animal flesh for their survival. While they may consume small amounts of plant material, they lack the physiology required for the efficient digestion of vegetable matter and, in fact, some carnivorous mammals eat vegetation specifically as an emetic (substance to induce vomiting).

References

[1] J. Duda, "Mustela putorius furo," Animal Diversity Web, 2003. [Online]. Available:

http://animaldiversity.org/accounts/Mustela_putorius_furo/. [Accessed January 2015].

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

[3] S. Brown, "History of the Ferret," Weasel Words, 2015. [Online]. Available: <http://weaselwords.com/ferret-articles/history-of-the-ferret/>. [Accessed January 2015].