



# Black Crested Mangabey

*Lophocebus aterrimus*

**Range:** Angola and the Democratic Republic of the Congo

**Habitat:** Lowland Rainforests

**Diet:** Fruit, leaves, nuts, nectar, and arthropods. They are important seed dispersers and pollinators.

**Lifespan:** Up to 30 years

**Description:** Black crested mangabeys are completely black and have a crest of pointy fur on top of their heads. Mangabeys have tails that are longer than their bodies to aid in balance. They have webbing between their toes which allows them to swim. Males are 15% - 30% larger than females.

**Breeding:** When the females are in estrus their buttocks swell and turn red. Females will give birth to a single infant that will grasp onto her body. The young are born furred and able to see. They are weaned in 7-10 months, but the young will stay with their mother until a new baby is born. Mature females will stay with their troops, while males will leave after 5 years.

**Behavior/Adaptations:** Mangabeys have a call known as a whoop-gobble which they use to communicate over large distances in the rainforest. They also have many other vocalizations and a throat sac that creates a booming quality to their calls. They live in troops, usually with one adult male leading the troop.

**Predators:** Humans

**Conservation:** They are listed as Near Threatened with declining populations due to habitat loss and hunting for bush meat.

**The Zoo's Mangabeys:** Our troop came from the Brookfield Zoo and consists of Videll (male), Kiwi (female), their infant Zingo (male) and an unrelated female named Lilikoi.

Information taken from the following sources:

<http://www.iucnredlist.org/details/12310/0>

<http://animals.sandiegozoo.org/animals/mangabey>

<http://www.newworldencyclopedia.org/entry/Mangabey>



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# African Crested Porcupine

*Hystrix cristata*

**Range:** Sub-Saharan Africa, North Africa, and Italy

**Habitat:** African crested porcupines are highly adaptable and found in forests, rocky areas, mountains, croplands, and sandhill deserts. They take shelter in caves, rock crevices, aardvark holes, or burrows they dig themselves.

**Diet:** Their teeth and digestive system are well adapted to eat mostly plant matter. Being rodents, they have sharp, chisel-like incisors and flat molars for grinding plants. Their diet consists of bark, roots, tubers, rhizomes, bulbs, fallen fruit, and cultivated crops. Occasionally, they will feed on insects, small vertebrates, and carrion.

**Lifespan:** African crested porcupines can live up to 28 years in captivity.

**Description:** The African crested porcupine is the largest porcupine in the world and the largest rodent in Africa. They have black and white quills along the head and back that can be raised into a crest, hence their name. These sturdy, sharp quills which are about 35cm long and marked with alternating light and dark bands, provide highly effective protection against predators.

Their short tail that has special quills at the end. These tail quills are broad, thin walled, and hollow at the tip, so that when vibrated, such as when the animal is threatened or aggressive, they produce a hiss-like rattle.

**Breeding:** Usually, females have only one litter per year. After a 35 day estrous cycle and 112 day gestation period, 1 or 2 well-developed offspring are born in a grass lined chamber within their burrow system. At birth or shortly afterward, the young's eyes open and incisors are completely broken through. Their body is covered with short hair, and back spines are still soft with individual sensing bristles projecting far beyond the spines. They are able to leave the den for the first time after one week, at which time the spines begin to harden. The young will begin feeding on solid food at 2-3 weeks of age. They typically reach adult weight at one to two years old.

**Behavior/Adaptations:** African crested porcupines live in small family groups, consisting of an adult monogamous pair and various infants and juveniles and they live in an elaborate burrow system. Individuals may remain in burrows through winter, but don't truly hibernate. These porcupines are terrestrial, rarely climbing trees, but are able to swim. Their quills serve as an effective defense against predations. When they are disturbed, they raise and fan the quills to create an illusion of greater size. If the disturbance continues, they stamp their feet, whirr their quills and charge the enemy, back end first. These attacks have been known to kill lions, hyenas, and humans.

**Predators:** Owls, leopards, pythons, and humans.

**Conservation:** They are considered a species of Least Concern.

**The Zoo's African Crested Porcupine:** Twix is male and was born in 2013.

## Interesting Facts:

- They are considered agricultural pests because they will eat cultivated root crops such as cassava, potatoes, and carrots. Farmers use dogs to hunt them or will smoke them out of burrows.
- Quill lengths vary on different parts of the body, from 1 inch to 12 inches on the back. New quills grow in to replace lost ones.

Information taken from the following sources:

<http://www.oregonzoo.org/discover/animals/african-crested-porcupine>  
<http://www.arkive.org/north-african-crested-porcupine/hystrix-cristata/>  
[http://animaldiversity.ummz.umich.edu/accounts/Hystrix\\_cristata/](http://animaldiversity.ummz.umich.edu/accounts/Hystrix_cristata/)



# African Pygmy Hedgehog

*Atelerix albiventris*

**Range:** Eastern Africa

**Habitat:** Hedgehogs inhabit a wide range across a variety of climates and terrains. They require dry shelters, well drained soil, and a good supply of ground-dwelling insects and invertebrates.

**Diet:** In the wild, they eat primarily insects. In one nocturnal span, they will eat an equivalent of one third their weight.

They have been known to eat earthworms, snails, eggs, small mammals, birds, frogs, fruit, fungi and roots.

**Lifespan:** Hedgehogs can live 3-4 years in the wild and up to 10 years in captivity.

**Description:** Hedgehogs are small, spiny-coated animals. They vary in color from brown to almost black. They weigh about 1 lb when fully grown. They are nocturnal; hence their sense of smell and hearing is better than their sense of sight.

**Breeding:** A hedgehog's gestation period is 34-37 days. On average, litters consist of three to four pups. The pups are born blind and deaf with soft spines.

**Behavior/Adaptations:** Hedgehogs have unique spines to aid in defense. A unique characteristic is that they can roll into a ball, with their spines sticking out in all directions to protect their soft belly. They have highly developed circular muscles that contract to form a "bag" into which the body, head and legs are folded. They sleep this way to protect themselves from predators. When they are frightened, they make a high-pitched hissing sound and can spit. Hedgehogs will also lick unknown objects repeatedly until a thick saliva forms in their mouth which they then rub onto their skin and spines (called self-anointing). This reason is speculated as to be protective in the wild.

**Predators:** Verreaux eagle owl, jackals, hyenas, honey badger, and humans

**Conservation:** African Pygmy Hedgehogs are not endangered or threatened.

**The Zoo's Hedgehogs:** Tatertot, born in 2013, and Hashbrown, born in 2017, are both female.

## Interesting Facts:

- The name hedgehog has been around since at least the 1500s. "Hedge" because they often hide in hedgerows between agricultural fields, and "hog" because of their pig-like snout and the grunting noise they make while foraging. But hedgehogs are not related to pigs (or porcupines)! They are related to gymnures and shrews.
- Hedgehogs can have 5,000-6,500 spines
- Researchers found that the blood of the European and African hedgehogs contains a lipoprotein identical to one of those found in human blood. This lipoprotein contributes to the formation of clots that cause heart attacks.
- Hedgehogs are nocturnal and sleep all day—up to 18 hours!

Information taken from the following sources:

<http://courses.ttu.edu/thomas/classPet/1999/Hedgehog/learn.htm>

<http://www.awf.org/content/wildlife/detail/hedgehog>

<http://sjliving.com/happyhollow/website/Hedgehog.html>

[http://www.oaklandzoo.org/animals/mammals/east-african-hedgehog\\*/](http://www.oaklandzoo.org/animals/mammals/east-african-hedgehog*/)

<http://www.rosamondgiffordzoo.org/assets/uploads/animals/pdf/AfricanPygmyHedgehog.pdf>

<http://www.oregonzoo.org/discover/animals/african-pygmy-hedgehog-0>

<http://animals.sandiegozoo.org/animals/hedgehog>



European Ferret

# European Ferret

*Mustela putorius*

**Range:** Western and Central Europe

**Habitat:** Forested areas, fields, parks, barns or other man-made shelters

**Diet:** Ferrets are carnivorous and will eat small mammals, birds, amphibians, and reptiles.

**Lifespan:** Average of about 5 years in the wild, and about 6 to 10 year in captivity

**Description:** Ferrets are a part of the weasel family and have potent musk glands that release a very strong scent. Their flexible bodies are usually between 14 and 18 inches long and weigh 2-4 lbs. They are covered with a semi-coarse fur that comes in a variety of colors.

**Breeding:** Mating season takes place between March and June. When courtship begins, males and females call back and forth to each other. After a 6 weeks gestation period, 2-10 kits are born in a nest made out of soft material (moss, hay, etc.).

**Behavior/Adaptations:** Ferrets are extremely curious and playful. They have very good sense of smell and hearing. Use of vision is actually secondary after other senses. Their long bodies are designed to chase prey into tight spaces. Ferrets can produce a high pitched scream when fighting.

**Predators:** Birds of prey, canines.

**Conservation:** European ferrets are dwindling in the wild due to habitat loss and human activity. A majority of the population is domesticated. They are related to black-footed ferrets (right) which were once thought to be extinct in the wild but are now slowly making a comeback in the United States.



Black-footed Ferret

**The Zoo's Ferrets:** Beethoven, Mozart and Igor are males born in 2017.

## Interesting Facts:

- Male ferrets are called hobs and females are called jills.
- Ferrets are sometimes used for pest control.
- Ferrets were domesticated from the Wild European Polecat.
- Ferrets were mentioned by Greek historian, Strabo in 63 BCE. He wrote that ferrets were bred in Libya to help hunt rabbits.

**Black-footed Ferret:** Native to central North America, these animals have been declared Extinct twice; once in 1979 only to have been found two years later by a dog in Wyoming, and again in 1987. The diet of black-footed ferrets is 91% prairie dog and while that species struggles, so does the ferrets'. Through breeding and relocation programs, populations have been re-established in South Dakota, Arizona, and Wyoming.

Information taken from the following sources:

[http://www.blankparkzoo.com/en/explore\\_the\\_zoo/meet\\_the\\_animals\\_2/european\\_ferret.cfm](http://www.blankparkzoo.com/en/explore_the_zoo/meet_the_animals_2/european_ferret.cfm)

<http://www.ferret.org/read/faq.html>



# European Rabbit

*Oryctolagus cuniculus*

**Range:** Original range from Spain to Northwest Africa. Introduced by man roughly 2000 years ago to Western Europe, Australia, New Zealand, South America, and various islands. As a result, the "wild" population now occurs throughout much of the world.

**Habitat:** Fields, open woods, and grasslands. Live in shallow burrows and holes, sometimes taking over the burrows of other animals. Multiple groups of rabbit burrows connected together are referred to as warrens. Extensively domesticated, they are raised for fur and food and are common household pets.

**Diet:** Herbivores that are active in the early morning and evening. Spring and summer they eat green leafy plants such as clover, grass and weeds. Winter time, they eat bark and the fruits of bushes and trees. They are known for damaging crops because they eat vegetable sprouts and chew the bark of fruit trees. At the zoo, rabbits eat rabbit pellets and vegetation.

**Lifespan:** Average of 4-6 years, with some reaching in age up to 9.

**Description:** All domesticated rabbits (about 45 varieties) are derived from the original breed of wild rabbit. They come in a variety of colors and sizes. Some are specifically bred for their hair, pelt, or meat. Rabbits shed once a year and the young shed several times until they get their adult coat.

Rabbits are lagomorphs, not rodents. Rabbits have 4 incisors on the upper jaw (rodents only have 2). Rabbits also use their feet to strike out in defense rather than simply using them to grasp objects like a rodent. Like rodents, rabbits have teeth made for continuous gnawing, and will grow through if they aren't worn down.

The rabbit is often confused with the hare. The hare is larger, has longer legs and ears, runs faster, changes color with the seasons, and builds a form but no burrow. The names are confusing because a Belgian Hare isn't a hare, but actually a variety of domestic rabbit. Whereas the American Jackrabbit is actually a hare! Minnesota has one native rabbit, the cottontail (Genus *sylvilagus*) and two hares, the jackrabbit and the snowshoe hare.

**Breeding:** Gestation period of 28-35 days with a litter of 1-15 young. The mother will pull out fur loosened by hormones from her chest to keep the young warm. Baby rabbits are born blind, with no fur, and closed ears. Eyes open after 11 days and ears in about 12 days. (Hares are born fully furred, open eyes, are able to run after a few minutes, and are born in the open). Baby rabbits are independent in about 30 days. A female is called a doe and a male is called a buck. Babies are referred to as a kit or bunny. (A baby hare is called a leveret.) Rabbits have the potential to bear 5-7 litters a year.

**Behavior/Adaptations:** Rabbits have very strong hind legs designed for running and excavating soil to dig burrows. Their eyes are placed on the sides of their head to allow them to see better behind and to the sides, rather than to the front. Large ears allow rabbits to pick up even faint sounds and provide a large surface for body cooling.

**Predators:** Foxes, badger, wildcats, marten, weasel, ferrets, polecat, birds of prey, wild boar, dogs, man. Rabbits are basically defenseless against predators, but they have very keen senses and avoid

danger by hiding in their burrows, hiding during the day, and using warning signals like foot thumping, teeth grating, and crying. They can leap 10 feet and travel about 18 mph but they tire quickly.

**Conservation:** Rabbit populations are stable. One reason they are so prolific is due to their ability to mature and reproduce so quickly.

**Interesting Facts:**

- Rabbits are coprophagous, which means they re-ingest the soft fecal pellets. (This is similar to chewing cud in grazing animals). Coprophagy may be a means of extracting as much nutrients as possible from food.
- Wild and domestic rabbits can be found on every continent except Asia and Antarctica.



# Chinchilla

*Chinchilla lanigera* (long-tailed)

*Chinchilla brevicaudata* (short-tailed)

**Range:** Found in the Andes Mountain range in Chile

**Habitat:** Chinchillas live most of their lives in arid, rocky, mountainous areas.

**Diet:** In the wild, chinchillas are herbivores; eating grass, seeds, fruits and insects.

**Lifespan:** Chinchillas are long-lived, with records of individuals surviving 20 years. On average, a captive chinchilla will live 10-15 years.

**Description:** As part of the Rodent Order, chinchillas are generally gray, small and furry. They have a dense fur coat to help keep them warm in the cold climate where they live. Adults weigh between 500-800 grams with females generally larger than males. They have large eyes and rounded ears which help them to see and hear at night.

**Breeding:** Chinchillas are known to have between 2-3 young in an average litter. Their gestation is about 111 days long and the young are born fully furred and with open eyes. A couple litters per year are common. They are known to breed very well in captivity.

**Behavior/Adaptations:** Wild chinchillas live in colonies of about 100 individuals. They spend most of their day hidden in the rock crevices and come out at night to eat. You would find them living between 10,000 and 15,000 feet up in the mountains which is a very cold climate hence their dense fur.

**Predators:** Natural predators include birds of prey, skunks, snakes, canines and felines.

**Conservation:** Due to hunting and the fur trade, Short Hair Chinchillas are listed as critically endangered on the IUCN Red List, while Long Hair Chinchillas are listed as vulnerable. Both species are also prohibited from international trade. Although captive breeding produces better fur for the fur trade, hunting still continues. It takes well over a hundred chinchillas to make a fur coat. Today, it is thought that only a few thousand chinchillas are left in the wild.

**The Zoo's Chinchillas:** Bug is female and Nim is male. They were both born in 2011.

## Interesting Facts:

- Up to 60 hairs can grow in one follicle. Because a chinchilla's fur is so thick, their fur would start to turn moldy before it dries out. Instead of a water bath, chinchillas take dust baths! The dust (usually it is volcanic ash) absorbs natural oils—similar to how we use dry shampoo.
- As a defense mechanism, chinchillas can release their fur (the fur they lost grows back).
- Chinchillas are also great jumpers and can jump up to 6 feet high.

Information taken from the following sources:

<http://nationalzoo.si.edu/Animals/SmallMammals/fact-chinchilla.cfm>

<http://www.stlzoo.org/animals/abouttheanimals/mammals/rodents/chinchilla.htm>

[http://www.endangeredspecieshandbook.org/trade\\_chinchillas.php](http://www.endangeredspecieshandbook.org/trade_chinchillas.php)

[http://www.oaklandzoo.org/animals/mammals/chinchilla\\*/](http://www.oaklandzoo.org/animals/mammals/chinchilla*/)

# Guinea Pig

*Cavia porcellus*

**Range:** South America

**Habitat:** Edges of forests, in marshes, and in rocky areas

**Diet:** Grasses, leaves, fruit

**Lifespan:** 5-8 years



**Description:** Guinea pigs have small, chunky bodies with relatively short legs. They generally grow between 10-14 inches in length and weigh between 1-3 pounds. Guinea pigs come in a variety of colors, patterns, and hair length.

**Breeding:** Female guinea pigs have the ability to produce 5 litters in a year. Most litters consist of 2 babies, and unlike most rodents, young guinea pigs are born covered with hair and with their eyes open. The young can run around within minutes after birth.

**Behavior/Adaptations:** Guinea pigs are nocturnal and hide in burrows or dense grass during the day. They can be found living in family groups in the wild, usually with 5-10 individuals. Guinea pigs are social animals and it is best to keep them in pairs or more. They are very gentle, and easy to handle. If kept as a pet, a guinea pig needs to be handled regularly to become/remain completely tame. They are poor climbers and cannot easily hide because of their dense bodies. They communicate by a series of sounds that sound much like a pig. Unlike most rodents, guinea pigs do not have a tail.

**Predators:** Snakes, birds of prey, humans, cats, foxes

**Conservation:** The guinea pig is listed as a species of Least Concern.

**The Zoo's Guinea Pigs:** Beaker and Bucky are both male. Beaker is Bucky's father and was born in 2013, and Bucky was born in 2014.

## Interesting Facts:

- They are the only mammal, besides primates, that cannot produce their own vitamin C. This means they have to eat fruit and vegetables everyday.
- Many cultures have domesticated guinea pigs, some for food and some for pets. The domestic population has developed differences from the wild population it is thought to have originated. The domestic species is well fed and as a result, has developed a large stomach and a longer small intestine. The wild species relies on rough vegetation so it maintains a small stomach, but a longer large intestine to help with digestion. There are still wild populations that can be found in parts of South America.
- It is unclear how guinea pigs got their name. Their wild relatives are called cavies and many breeders prefer to call them cavies as well. Many theories have evolved about the origination of the name, "guinea pig". These include they were brought to Europe from Dutch Guianan in South America and that was confused with guinea. Others believe they were sold by traders called "guineamen". Others believe it came from the squeaking sound they make.

Information taken from:

Grizmek's Animal Life Encyclopedia

Elward, Margaret. Guinea Pigs, A Complete Introduction. T.F.H. Publications, Inc. New Jersey, 1987.



# African Straw-colored Fruit Bat

*Eidolon helvum*

**Range:** Central and South Africa, Madagascar, and the Arabian Peninsula

**Habitat:** Forest and Savannah zones, and sometimes urban areas. They prefer tall trees for roosting.

**Diet:** Bark, flowers, nectar, leaves, and fruit (dates, figs, pears, mangoes, avocado, passion fruit, etc.).

**Lifespan:** They can live up to 21 years old.

**Description:** The straw-colored fruit bat got its name for the yellow fur on their back. Their bellies are a brown color while the skin of their wings is dark brown or black. They can grow between 6-9 inches from head to tail and have a wingspan of 2 ½ feet.

**Breeding:** Mating usually occurs between April and June. The embryo usually undergoes a process of delayed implantation, meaning that it will become dormant until a later date – in this case, October. Females will give birth to one offspring per year (called a pup) in clusters of females and will care for her pup until it is old enough to survive on its own. For their size, bats are the slowest reproducing mammal. When first born, pups can weigh up to 25% of the mother's body weight, which is equivalent to a human mother giving birth to a 30-40 pound baby!

**Behavior/Adaptations:** Like many other fruit bat species, this bat does not use echolocation to find food. When eating, they will suck out the juices of the fruit they eat, and leave the rest as dry pellets, including the seeds. This makes them important seed dispersers and are also known as very important pollinators. Bats belong to the taxonomic order Chiroptera, which translates to "hand wing." A bat's wing is composed of the same four fingers as a human hand with a hook-like thumb and a skin membrane connecting the digits.

**Predators:** While fruit bats don't have many predators because they live in colonies, owls, snakes, crows, hawks, and mammals can hunt them.

**Conservation:** Although they are considered possibly the most widespread fruit bat in the world, they are listed as near threatened. In local regions, parts of the fruit bat's range is affected by severe deforestation. Across West and Central Africa the population is hunted for food and medicinal use.

**The Zoo's African Straw-colored Fruit Bat:** Weber is male and was born in 2005. He is on exhibit in Grigg's Learning Center on the lower level of the Main building. A colony of straw-colored fruit bats can also be found in the nocturnal section at the Primate Conservation Center building.

## Interesting Facts:

- They will bite into soft wood to gain moisture.
- Colony size can vary from 100,000 to 1,000,000 individuals.
- Over 8 million straw-colored fruit bats migrate to Kasanka National Park in Zambia in November each year. This migration is the largest mammal migration in the world!
- Bats are the only true fliers in the mammal family.

- The bat family can be separated into two groups: mega bats and micro bats. Mega bats are usually larger in size with big eyes and an elongated snout, do not use echolocation, and eat fruit (straw-colored fruit bats are mega bats). Micro bats are like the bats we have in Minnesota and Wisconsin—they use echolocation, eat insects, and are usually quite small.

Information taken from the following sources:

<http://www.arkive.org/straw-coloured-fruit-bat/eidolon-helvum/>

[http://animaldiversity.org/accounts/Eidolon\\_helvum/](http://animaldiversity.org/accounts/Eidolon_helvum/)

<http://www.akronzoo.org/straw-colored-fruit-bat>

<http://www.iucnredlist.org/details/7084/0>

<https://www.defenders.org/bats/bats>

<http://animals.sandiegozoo.org/animals/bat>