Chinchilla lanigera

Chinchilla


Other names:

Physical Description: A small mammal with extremely dense, velvet-like, blue-gray fur with black tinted markings. It has large, rounded ears, big eyes, a bushy tail, and long whiskers. The front paws have only four well-developed digits; the fifth toe is vestigial. The hind legs are longer than the forelimbs with three large toes and one tiny one. It is quite agile and capable of leaping both horizontally and vertically, reaching heights up to 6ft vertically. Weight is reported to range from 18-35 oz. The head and body is 9-15”, averaging 12”; the tail averages 3-6”. Females (does) are larger and heavier than males (bucks). Crying, barking, chattering, chirping, and a crackling vocalization if angry are all normal sounds for a chinchilla. Domestic chinchillas have been selectively bred to rear other colors beside the wild blue-gray including beige, silver, cream and white.

Diet in the Wild: Bark, grasses, herbs, seeds, flowers, leaves.

Diet at the Zoo: Timothy hay, chinchilla diet, apples, grapes, raisins, banana chips, almonds, peanuts, sunflower seeds, romaine.

Habitat & Range: High Andes of Bolivia, Chile, and Peru, but today colonies in the wild remain only in Chile, live within rocky crevices and caverns.

Life Span: Up to 15-20 years in captivity; avg. 8-10 in the wild.

Perils in the wild: Birds of prey, skunks, felines, snakes, canines, and humans.

Physical Adaptations:

- If threatened, chinchillas depend upon their running, jumping, and climbing skills.
- If provoked, they are capable of inflicting a sharp bite.
- The chinchilla’s fur is unusually thick. It was more hairs per cm² than any other animal. ~20,000+ hairs per cm² due to the fact that chinchillas have from 50-100 hairs/follicle (whereas we just have 1-2!).
- Pads on their feet are hairless and fleshy to allow them to gain a good foothold.
- Large ears, their hearing is somewhat more sensitive than ours.
- Chinchillas do not sweat, they expel heat through their ears and feet.
- Red blood cells of a chinchilla can carry more oxygen than those of other rodents. Helps them cope with living at high altitudes (over 12,000’) where there is naturally less oxygen in the atmosphere.
- Chinchillas have a variety of defensive tactics, including spraying urine and releasing fur if bitten.
- The thick fur resists parasites, such as fleas, and reduces loose dander (hypoallergenic).

Behavioral Adaptations:

- Chinchillas are nocturnal but do adapt to a diurnal life style in domestication.
• They also use their coloration to look like a granite rock and freeze when sensing danger.
• Live in colonies, up to 100 members, highly social animals.
• Chinchillas are coprophagic, they reingest their own waste to add good bacteria to their digestive tract and absorb more nutrients from their food.
• Chinchillas eat and drink in very small amounts. In the wild, they eat and digest desert grasses, so they cannot efficiently process fatty or high protein foods, or too many green plants.
• Chinchillas can sleep upside down. This is because they naturally sleep in small crevices or holes and can squeeze into the tiniest of spaces. They can also sleep upright or on their sides.
• Chinchillas clean their fur by taking dust baths of fine pumice. In the wild, the dust is formed from fine, ground volcanic rocks. The dust gets into their fur and absorbs natural oils, moisture, and dirt.
• Chinchillas do not bathe in water because the dense fur prevents air-drying, retaining moisture close to the skin, which can cause fungus growth or fur rot. A wet chinchilla must be dried immediately with towels and a no-heat hair dryer.

Reproduction and Development:
• Chinchillas, which are basically monogamous, reproduce very slowly. They are very sensitive to high humidity and heat. The ideal temperature range is 40-75 °F.
• Both male and female chinchillas reach sexual maturity at 8 months old. Breeding season is mainly during November and May, however, they may breed at any time of the year.
• The female gestation period is quite long compared to other rodents, lasting around 111 days. Average 2-4 kits in a litter, up to 8 (called kits).
• The kits weigh 1-2oz at birth and because of the length of the gestation period; they are born with fur and with their eyes open.
• The kits suckle milk until they are weaned at 6 - 8 weeks old.
• Chinchilla kits often greet their parents with a very high pitch chirp, usually to indicating hunger.

Additional Information:
• Name means "little chincha"- named after Chincha people of the Andes, who wore chinchilla fur.
• Juan Ignazio Molina, who gave the animal its scientific name in 1782, was one of the first individuals to suggest that chinchillas could be bred in captivity in order to obtain their fur. Nearly two centuries later, M.F. Chapman, over a period of three years was able to capture 17 wild chinchillas. Eleven of these were brought to the US in 1923. Today commercial chinchillas in the US and Canada are descended from these 11 animals. Anywhere from 100-150 furs are used to make a short coat.
• In the wild, chinchillas probably are benign to man and a valuable food source for other wildlife. They are raised commercially for the fur and pet trade. Attempts have been made to restock the Andes Mountains with chinchillas that have been bred on fur farms. The result of these efforts is unknown. Poaching may still be a problem since the coats of wild chinchillas are superior to those of animals that are bred commercially.
• The chinchilla is often used as an animal model in researching the auditory system, because the chinchilla's range of hearing (20 Hz to 30 kHz) and cochlear size is close to that of a human, and the chinchilla cochlea is fairly easy to access.

Conservation Status: Vulnerable, due to habitat loss by the burning and harvesting of the algarobilla shrub and hunting for their fur and meat.
Conservation Efforts: Chinchilla are protected by law in their natural habitat, however, it is difficult to monitor hunting in the remote mountain ranges of the Andes and illegal hunting does continue in some areas.

Glossary: List of definitions of the most important recurrent technical terms used in the text.

Coprophagy – the ingestion of feces/excrement, regardless of purpose.

Diurnal – active during the day.

Monogamous – having only one mate, either per mating season, or for life.

Nocturnal – active at night. Nocturnal animals typically sleep during the day and are active at night, and have a suite of adaptations for nocturnal survival, such as a heightened sense of hearing, smell, and sometimes even eyesight.

Sources:
- Cincinnati Zoo & Botanical Gardens
- http://animaldiversity.ummz.umich.edu/accounts/Chinchilla_lanigera/
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- www.animalmedicalhospital.net/chinchillas.html
- http://www.animalcorner.co.uk/wildlife/chinchilla.html