

## Chinchilla

*Chinchilla lanigera*

**Class:** Mammalia **Order:** Rodentia **Suborder:** none **Family:** Chinchillidae

**Other Names:** Long-tailed chinchilla, Chilean chinchilla

**Other Subspecies:**

**Other Relatives:** *C. chinchilla*/*C. brevicaudata* (short-tailed chinchilla)

### Zoo Chinchillas 2.1

'Molly' 0.1 – female,

DOB: Sometime between 2000-2001 Aq: 4/16/2002

'Night' 1.0 – male,

DOB: 5/24/2006 Aq: 6/21/2007

'Don' 1.0 – male,

DOB: 5/24/2006 Aq: 6/21/2007

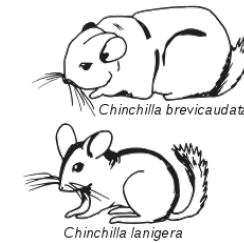
*About the Chinchillas 'Molly,' 'Night,' & 'Don'*

All three chinchillas were relinquished pets. [1]

Molly weighs 1lb 1¼ oz.; Night weighs 1lb 1.8 oz.; Don weighs 1lb 5.8 oz.

**Status** Critically endangered; CITES Appendix I  
Fewer than 10,000 *C. lanigera* are thought to have survived in the wild, and attempts to reintroduce chinchillas into the wild have failed [2].

Estimated to be more than 90% over the past 3 generations (15 years) [3]



### Geographic Region

Chinchillas are currently found only in the mountains of northern Chile [2].

### Habitat

Barren, arid, and rugged areas of the mountain chains connecting the coastal mountain ranges and the Andes [3]. Typical habitat is rocky or sandy with a sparse cover of thorn shrubs, few herbs and forbs, scattered cacti, and patches of succulent bromeliads toward the coast [3]. The chinchilla's native habitat consists of low humidity with sharp variations between daytime and evening temperature, and are tolerant of temperatures >32°F [4].



### Characteristics

#### Size:

- *Length:* Head & Body - 225-380 mm (8.5 – 15"); *Tail:* 75-150 mm (3"-6") [2]
- *Weight:* 500-800g (1-1.5 lbs) [2]

**Longevity: Wild:** 10-11 years [2]    **Captivity:** up to 20 years [2]

### Physical Description

- The fur is extremely dense and soft. As many as 60-80 hairs grow out of one follicle (as compared to one hair per follicle for humans) [2] [4].
- Their soft, dense fur insulates it in the cold barren mountainous regions where it lives [5]
- Their tails measure up to one-third the size of its body [5]
- In the wild, chinchillas are grey with each hair usually having a black tip. The **ventral** side is usually bluish, pearl, or brownish grey, and the belly is yellowish-white. Its tail is furry with coarse hairs on the **dorsal** surface [2].
- The head is broad and the external ears are large [2].
- Chinchillas have large, black eyes with a vertical split pupil, **vestigial** cheek pouches, and incisors with colored enamel [2].
- Both the forefoot and hind foot have four digits with stiff bristles surrounding the weak claws [2].

### Dimorphism

**Males:** weighing up to 500 g [2]

**Females:** weighing up to 800 g [2]. Female chinchillas can be 50 percent larger than males [1].

### Diet: Herbivore

While eating, Chinchillas sit erect and holds the food in its forepaws.

**Diet in the Wild:** primarily **folivorous**, feeding on many types of vegetation, but primarily on grass and seeds [2]. They may also eat insects and bird eggs opportunistically.

**Diet in the Zoo:** chinchilla pellets and hay



## Behavior

- *Nocturnal*, night-active & *Crepuscular*, active at dawn and dusk active
- However, they have been observed on sunny days to be sitting in front of its hole and climbing and jumping on the rocks with amazing agility.
- Chinchillas have been described as relatively intelligent; they are known to memorize trails and have good memories [2].
- They are fastidious groomers and require dust as part of their daily bathing [6]

## Social Structure & Communication

- Chinchillas are social animals and have been known to live in colonies of more than 100 individuals.
- Female chinchillas are the dominant sex and are very aggressive toward one another and toward males during estrus. Despite this aggressiveness, serious fighting in the wild is rare [2].

## Defense Mechanisms

- They express threats through growling, chattering their teeth, and urinating [2].
- By day they mainly rest in rocky crevices and caverns, out of sight of predators [4].
- A chinchilla will try to flee and, if trapped, may try to frighten a predator off by standing on its hind legs to look bigger. Chinchillas also puff up their already fuzzy tails to look more intimidating. If all else fails, a chinchilla will try to bite its attacker and, if successful, will inflict a painful bite [4].
- If threatened, chinchillas may spray urine or release chunks of constricted fur (called a 'fur slip'). Fur re-growth may take several months [4].

## Reproduction and Growth

- Sexual maturity in both sexes occurs on average at 8 months, but may occur as early as 5.5 months [3]
- Female chinchillas are mostly monogamous [2].
- The breeding season occurs between May and November [2].
- Gestation lasts for 111 days, which, for a small mammal, is a relatively long period [5]
- 1-6 newborn **precocial** pups (also known as kits) are born, though 2 is average litter size. Newborn chinchillas weigh up to 35 g, are fully furred, and have their eyes open [2].
- Females normally have two litters per year, with two to three young per litter. Young are weaned after 60 days [2].

## Conservation

This species was once widespread, but in 1996 only 42 discrete colonies could be found in the wild [3].

**Use & Trade:** Chinchillas have been historically hunted for their dense, soft fur, but it takes up to 50 chinchillas to make one coat. This is the cause for the extreme population loss of about 90% of the wild population has been lost over the last 15 years. Now, however, they are farm-bred to reduce the impact on wild populations [2].

- Legislation to protect the species has been in place since 1929, but was not efficiently enforced until the establishment of the Reserva Nacional Las Chinchillas in Auco, Chile in 1983 [3].

**Threats:** Chinchillas are now protected by law in their natural habitat, yet hunting of this animal for its fur continues in remote areas, which makes enforcement hard. Populations have also dwindled because of burning and harvesting of the algarobilla shrub in the lower altitudes [2].

- This species has been threatened for years by human activities, including poaching, hunting, grazing by cattle and goats, mining, and firewood extraction. Despite current protection measures, populations are continuing to decline. Current hypotheses to explain this decline include [3]:
  - current numbers are lower than the minimum viable population size for long-term survival;
  - predation by foxes upon chinchillas has increased during the past decades;
  - the later decline is caused by long-term abiotic and/or biotic changes; and
  - the trend might represent the decreasing phase of a long-term natural cycle of chinchilla populations.

**Predators:** Their main non-human predators include: raptors, skunks, wild cats, snakes, and wild dogs.

## Did You Know?/Fun Facts

- Are rodents so their teeth never stop growing!
- Have a long gestation period leading to the young being born fully furred and with eyes open.
- Lack the ability to sweat
- Wild chinchillas are usually only grey, but in captivity, they can be white, beige, black, violet, or sapphire
- Domesticated chinchillas are thought to have come from the *C. lanigera* species

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

**Dorsal** - of, on, or relating to the upper side or back of an animal, plant, or organ.

**Folivorous** - an herbivore that specializes in eating leaves

**Precocial** - term referring to the state of readiness of young; precocial young are relatively mature and mobile from the moment of birth or hatching. (Altricial young need more long-term parent protection and rearing.)

**Ventral** - of, on, or relating to the underside of an animal or plant; abdominal.

**Vestigial** - refers to genetically determined structures that have apparently lost most or all of their ancestral function in a given species, but have been retained through evolution.

## References

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- [2] Animal Diversity Web, "Chinchilla lanigera; chinchilla," Animal Diversity Web, February 2002. [Online]. Available: [http://animaldiversity.org/accounts/Chinchilla\\_lanigera/](http://animaldiversity.org/accounts/Chinchilla_lanigera/). [Accessed November 2014].
- [3] IUCN Red List, "Chinchilla lanigera," IUCN Red List, 2014. [Online]. Available: <http://www.iucnredlist.org/details/4652/0>. [Accessed November 2014].
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- [6] L. A. Corriveau, DVM, "Chinchilla Wellness," Perdue University, Lafayette, IN, 2014.