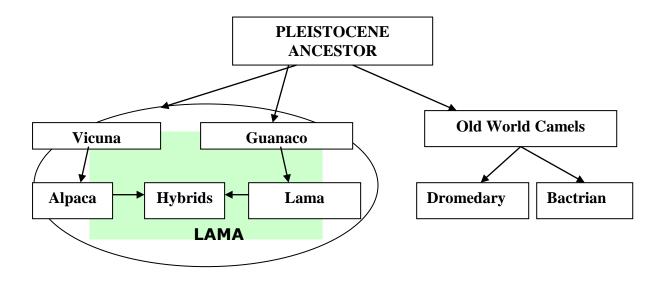
## SOUTH AMERICAN CAMELIDS – ORIGIN OF THE SPECIES



Llamas were not always confined to <u>South America</u>; abundant llama-like remains were found in <u>Pleistocene</u> deposits in the <u>Rocky Mountains</u> and in <u>Central America</u>. Some of the <u>fossil</u> llamas were much larger than current forms. Some species remained in North America during the last ice ages. Llama-like animals would have been a common sight in 25,000 years ago, in modern-day USA.

The camelid lineage has a good fossil record indicating that North America was the original home of camelids, and that Old World <u>camels</u> crossed over via the <u>Bering land bridge</u> & after the formation of the <u>Isthmus of Panama</u> three million years ago; it allowed camelids to spread to South America as part of the <u>Great American Interchange</u>, where they evolved further. Meanwhile, North American camelids <u>died out</u> about 40 million <u>years</u> ago.

Alpacas and vicuñas are in genus Vicugna. The genera Lama and Vicugna are, with the two species of true camels.

**Alpaca** (*Vicugna pacos*) is a <u>domesticated</u> species of <u>South American camelid</u>. It resembles a small <u>llama</u> in superficial appearance. Alpacas and llamas differ in that alpacas have straight ears and llamas have banana-shaped ears. Aside from these differences, llamas are on average 30 to 60 centimeters (1 to 2 ft) taller and proportionally bigger than alpacas.

Alpacas are kept in herds that graze on the level heights of the <u>Andes</u> of Ecuador, southern <u>Peru</u>, northern <u>Bolivia</u>, and northern <u>Chile</u> at an altitude of 3,500 m (11,000 ft) to 5,000 m (16,000 ft) above sea-level, throughout the year. Alpacas are considerably smaller than <u>Ilamas</u>, and unlike Ilamas, alpacas were not bred to be <u>beasts of burden</u> but were bred specifically for their fiber. The fiber comes in more than 52 natural colors as classified in Peru, 12 as classified in Australia and 16 as classified in the United States.

Alpacas have been domesticated for thousands of years. The Moche people of Northern Peru often used alpaca images in their art. There are no wild alpacas. The closest living species are the wild vicuña, also native to South America, which is believed to be the wild ancestor of the alpaca. The alpaca is larger than the vicuña but smaller than the other camelid species.

Of the various camelid species, the alpaca and vicuña are the most valuable fiber-bearing animals: the alpaca because of the quality and quantity of its fiber, and the vicuña because of the softness, fineness and quality of its coat. Alpacas are too small to be used as pack animals. Instead, they were bred exclusively for their fiber and meat



- An alpaca is approximately half the size of a llama.
- Too small to use for carting or packing.
- > An alpaca's function is to grow beautiful fleece.
- > They Live 15 to 20 years
  - ...grow to about 1 metre (at the shoulder).
  - ...weigh up to 70 kg to 100 kg
  - ...gestate for approximately 335 days
  - ...give birth to young weighing usually 6 8 kg
- An alpaca has straight ears.
- Alpacas are very much herd animals and must be with their herd mates.
- ➤ The alpaca is a fine fiber bearing animal and not really used for anything else.

The **vicuña** (*Vicugna vicugna Molina*) or **vicugna** is one of two wild <u>South American camelids</u>, along with the <u>guanaco</u>, which live in the high alpine areas of the Andes. It is a relative of the <u>llama</u>, and is now believed to be the wild ancestor of domesticated <u>alpacas</u>, which are raised for their <u>fiber</u>. Vicuñas produce small amounts of extremely fine wool, which is very expensive because the animal can only be shorn every 3 years. When knitted together, the product of the vicuña's fur is very soft and warm. It is understood that the <u>Inca</u> raised vicuñas for their wool, and that it was against the law for any but royalty to wear vicuña garments.

Both under the rule of the Inca and today, vicuñas have been protected by law. Before being declared endangered in 1974, only about 6,000 animals were left. Today, the vicuña population has recovered to about 125,000, and while conservation organizations have reduced its level of threat, they still call for active conservation programs to protect population levels from poaching, habitat loss, and other threats.

The vicuña is considered more delicate and graceful than the <u>guanaco</u>, and smaller. A key distinguishing element of morphology are the better developed incisor roots for the guanaco. Its long, woolly coat is tawny brown on the back while the hair on the throat and chest is white and quite long. The head is slightly shorter than the guanaco's and the ears are slightly longer. The length of head and body ranges from 1.45 to 1.60 m (about 5 ft); shoulder height from 75 to 85 cm (around 3 ft); weight from 35 to 65 kg (under 150 lb).

In order to prevent poaching there is a round up every year, and all vicuñas with fur longer than 2-1/2 centimeters are shorn.



Many people confuse the Alpaca and Llama. They are both as described Camelids from South America.

➤ The Llama, also, has fiber that can be used but it is much coarser, although it does have a soft undercoat that is fine and is used by spinners.

<u>A Llama</u> is a much larger animal. They have been used as guard animals for alpacas. It is really not recommended though. Their larger size makes them great as a pack animal. They are also used for pulling carts. Llamas are more independent and can often be kept separate from other llamas.

They have other physical differences besides their size.

A llama has curved ears, often called banana shaped. A llama's back is straighter which makes them good for packing.

The **Ilama** (*Lama glama*) is widely used as a <u>pack animal</u> by the <u>Incas</u> and other natives of the <u>Andes mountains</u>. In South America Ilamas are still used as beasts of burden, as well as for the production of <u>fiber</u> and meat.

The height of a full-grown, full-size llama is between 1.7 meters (5.5 ft) and 1.8 meters (6 ft) tall at the top of the head. They can weigh between approximately 130 kilograms (280 lb) and 200 kilograms (450 lb). At birth, a <u>baby llama</u> can weigh between 9.1 kilograms (20 lb) and 14 kilograms (30 lb). When using a <u>pack</u>, llamas can carry about 25% to 30% of their body weight for several <u>miles</u>.



The **Guanaco** (*Lama guanicoe*) is a camelid native to South America that stands between 107 and 122 centimeters (3.5 and 4 feet) at the shoulder and weighs about 90 kg (200 lb). The colour varies very little, ranging from a light brown to dark cinnamon and shading to white underneath. Guanacos have grey faces and small straight ears. They are extremely striking with their large, alert brown eyes, streamlined form, and energetic pace. The name Guanaco comes from the South American language Quechua word "huanaco". The guanaco is native to the arid, mountainous regions of South America. Guanacos are found in the altiplano of Bolivia, Peru, Ecuador, Colombia, Chile and Argentina. In Chile and Argentina they are more numerous in Patagonian regions, in places like the Torres del Paine National Park, and Isla Grande de Tierra del Fuego. In these areas they have more robust populations, since there are limitations on grazing competition from livestock. Bolivian Indians have been known to raise guanacos to help them regain their population stability. A Guanaco typical life span is 20 to 25 years







Modern day Alpaca



Modern Day Vicuna

Modern Day Lama



Modern Day Guanaco