

Introduction of SACs to Other Environments: Historical Perspectives

The first contact of Europeans with South American *llama* herds was most likely that of Captain Francisco Pizarro's crew when he first arrived at the port of Tumbes in northern Peru, some time in 1528. Pizarro took some *llamas* back to Spain and displayed them at the Spanish court. In those days the *llama* was known by the Spaniards as *Carneros de la Tierra* (Rams of the Land) and later on as *Carneros de Cuello Largo* (The Long-Necked Rams). Since then, many attempts have been made to introduce members of the SAC family to Spain, England, France, Germany, and Holland during the 16th, 17th, and early 18th centuries. No accounts of any of these introductions are available in literature.

Table 16: Estimated Output Indexes in *Alpaca* Breeds in the Highland Zone of Peru at Three Levels of Technology

	Level of Technology Improvement		
	<u>High</u>	<u>Medium</u>	<u>Low</u>
Female adult live weight, kg	45.0	43.0	40.0
Fertility index, %	62.0	58.0	33.0
Adult mortality, %	5.0	6.0	7.0
Mortality at birth, %	12.0	14.0	18.0
Carcase weight at slaughter, kg	28.0	26.0	23.0
Fibre weight, kg	1.6	1.4	1.2

Adapted from Bryant et al. (1989)

Source: FIDA 1990

Table 17: Zootechnical Indexes in the *Llama* and *Alpaca*

Indexes	Actual %	Possible %
Natality	45	80
Number of births per female	4	7
Age of weaning	9 months	5 months
Age of first mating	5 years	3 years
Age of first shearing	4 years	3 years
Fibre yield in <i>llama</i>	1 kg	3 kg
Fibre yield in <i>alpaca</i>	2 kg	4 kg
Meat yield in <i>llama</i>	24 kg	45 kg
Meat yield in <i>alpaca</i>	18 kg	35 kg

Source: Direct observation and investigation tests 1982-1988 by Max Paredes C. In: FIDA 1990.

By 1770, the Government of Holland auctioned a herd of 32 *alpacas* and *llamas*, belonging to King Wilfred II. It is said that this herd was purchased by the Frenchman, Buffon, Father of Veterinary Sciences, and sent to the Veterinary School of Alfort.

The greatest number of *llama* that were ever carried to Europe at one time was a herd that arrived in Cadiz in 1808. It originally consisted of thirty-six individuals, including the types called *llama*, *alpaca*, and *vicuna*. They were brought from the highlands of Peru to Buenos Aires, on the Atlantic coast, by slowly travelling two to three leagues a day, and then shipped to Cadiz. Only eleven arrived in Cadiz, two of which died there. These animals were carried to Europe as a present from the Prince of Peace, Godoy, to Empress Josephine. There is a report that six *alpacas* were imported to New Hampshire in the United States in 1849.

One of the most interesting accounts of the introduction of the *alpaca* to other countries is Charles Ledger's attempts to introduce them into Australia. He was particularly impressed by their adaptability and wrote: "No animal in the creation, it is my firm conviction, is less affected by the changes of climate and food". In 1858, he landed 274 animals in Sydney after four months at sea. However, in 1864 the Australian government decided to abandon the *alpaca* business entirely, forced by the Merino breeders who saw in the *alpaca* a fine wool producer and a future competitor.

In the late 1800s, the *llama* was introduced into the USA as a zoo exhibit; the number of imports was small and generally included *guanacos* or *guanaco* hybrids. One of the more significant importations was made in the early 1900s into the California coastal area by W.R. Hearst. In 1930, import of SACs was cut off by a "Foot and Mouth Disease" embargo on all South American hoofed stock. Finally, in the early 1980s, USA *llama* breeders started to import the *llama* and *alpaca* from Chile, and now the *llama* has developed from a zoo curiosity to a multi-million dollar industry growing at an exceptional rate. Nowadays the population of *llama* and *alpaca* in the USA consists of around 25,000 animals.

In the last 12 years, a total of 20,000 *llamas* and *alpacas* has been exported from Chile and Bolivia to the USA, Canada, Spain, Israel, Ecuador, and New Zealand. Australia is again in the *llama* and *alpaca* business, getting their animals from New Zealand. According to the "New Zealand Herald", lamoid breeders believe that, under New Zealand's climatic and management conditions, they can improve the quantity of fibre and natality that *alpaca* and *llama* are producing in the Andean Region.