<u>USHTRA</u> <u>The two humped Bactrian Camel of Zarathushtra's time</u>

The wild Bactrian camel, *Camelus bactrianus* lives in the Gobi <u>desert</u> and the <u>grasslands</u> (steppes) of Asia. In this harsh habitat of fragile desert ecosystems with very hot and very cold climates they **have unfortunately become a critically endangered species.** There are barely 350 wild Bactrian camels left in the Mongolian Gobi desert and about 650 further south in Xingjian province, China. The government had no specific plans in place for their conservation until recently. However a breeding and research program has been commenced in Mongolia by a British private enterprise with considerable degree of success in breeding and the fact they are totally immune from developing cancer. Although surrounded by nuclear radiation, **these camels are immune to cancer genes** (our full-blooded indigenous aborigines and the Shark fish are also totally immune from developing cancer), which makes them an invaluable source for cancer research. Their preservation from extinction, thus, becomes all the more imperative.

The 'Ushtra (suffix) 'name title:

They were domesticated as beasts of burden and as a source of wool, milk, and meat sometime before 2500 BCE in Asia, well after the earliest estimates for the one humped Arabian camel.

It is no wonder that by circa 1750 BCE, around the time of Zarathushtra, the <u>Gathic 'aspa' (horse) suffix in</u> <u>name-titles</u> gradually changed to <u>the 'ushtra' (camel) suffix</u>. The name of the Prophet Zarathushtra is derived from (Gathic: 'zarath'/ Sanskrit equivalent: 'harit' meaning golden and 'ushtra' Sanskrit & Old Persian meaning camel). The Spitama family tree runs as follows: - *Spitama, Hardār, Hardārshna, Paitiraspa, Chākhshnish, Haéchataspa, Aurvataspa, Pactiraspa, Pourushaspa and Zarath-ushtra*. The 'aspa'- horse suffix name title changed to the 'ushtra'- camel suffix name title. Not only did our Prophet acquire the 'ushtra' title but also both his two elder brothers, Rata-ushtra and Rangha-ushtra.

The most distinctive feature of the Bactrian camels is their two humps, which have loose skin folds containing fat (and not water), used for nourishment when food is <u>scarce</u>. They have loose fatty layers of folded skin on their shoulders upper legs and chin, too. These camels can go without food and water for several days. In addition to the water that is normally stored in the body additional 1.5 gallons are stored in special sacks around its stomach. When water is available, they drink only to replace the water they have lost. If they have used up all the body water they are capable of drinking up to 32 gallons of water to fill up within about 10 minutes. They are extremely well suited to water conservation. They sweat very little, emit very little water as waste fluid and can change their body temperature threshold, depending on the <u>ambient</u> temperature to help contain water loss. The Bactrian camel is the only mammal on Earth that can survive on salt water when exposed to dire and parched conditions.

As beasts of burden they are very hardy too, with strong legs and wide two-toed padded hoofs, well-suited to carry a great deal of cargo in the soft desert sand. They are a stockier animals than their Arabian counterpart, being able to survive from the scorching desert heat of northern <u>Iran</u> to the frozen icy winters of Mongolia and China. They are rather slow moving. A laden Bactrian camel will move about 2.5 mph, compared to the one-humped Arabian Camel travelling 8-9 mph and are also able to cover only about 30 miles a day compared to the Arabian camel covering longer distances. But they live longer - up to 40 years compared to the 25 years of the Arabian camel.

Their long, thick wooly fur is usually a beige color with course hair the length of which varies with the season. The loose layers of skin with under-wool and fat keep them warm during cold desert nights and also insulate against daytime heat. Herbivores, they eat grass, leaves, and grains. Their mouth is extremely tough, allowing them to eat even dry thorny desert plants during lean seasons. 8-10 feet long their height is over 7 feet at the hump and the weight in excess of 1,600 pounds.

To protect themselves from sand and the harsh conditions, they have bushy eyebrows, a double row of long eyelashes, hairy ear lobes and ear canals, and they can tightly close their nostrils and lips to keep out flying sand. Thick leathery pads protect the knees and chest. The tail is bulky and hairy.

The more durable <u>Bactrian Camels</u> first began to arrive in Africa in the fourth century BCE introduced by the <u>Persian</u> conquest of <u>Egypt</u> under Cambyses. It was not until the <u>Islamic conquest of North Africa</u>, however, that these camels became common as they were imported *en masse*. These domesticated camels were used through much of North Africa, and the <u>Romans</u> maintained a corps of camel warriors to patrol the edge of the desert.



The Apadana Palace, west side of eastern stairway, Bactrians bearing tributes.

Bas relief from Persepolis Apadana Palace

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