

## Trans-Saharan Trade

Between the 300s and the late 1500s CE, in the grasslands regions of West Africa rose at least three successive empires built on trade—Ghana, Mali, and Songhai. These three empires built their wealth on the north-south trans-Saharan trade. Camel caravans carried such goods as salt, cloth, and metalware south from North Africa, and gold, ivory, and slaves north from the tropical rainforest kingdoms. Along with the trade goods from North Africa came Arab merchants and finally Muslim warriors.

Camels were the ideal beast of burden for crossing the great Sahara. Camels can travel at speeds of 8–10 miles per hour (13–16 km per hour) for up to 18 hours without resting. The hump of the camel stores fat that can be used for sustenance when food is scarce. Camels are also known for being able to go long periods of time, even up to a week in the summer, without drinking water. This

unique ability is due to the way camels regulate their body temperature. Humans, for example, need to perspire in order to keep variations in their body temperature to within 2°F. Perspiration leads to a loss of water through evaporation. Camels, however, store water in their tissues and cells and are able to withstand variations in body temperature up to 11°F without perspiring. At night, camels release their body heat so that their temperature is low again in the morning.