

History of Rubber

Discovery & Earliest Uses

The earliest archaeological use of natural latex dates back to the Olmec culture (2,500 to 400 BCE), a major Mesoamerican civilisation who occupied the present-day tropical lowlands of Mexico. The indigenous population made balls using the primitive rubber harvested from the latex-producing tree, *Castilla elastica*, also known as the Panama rubber tree. There is strong evidence that these balls were used for ballgames that were held at times of religious significance or simply for recreation. Although the Olmec people are credited with the first recorded use of rubber and the first team sport, it is suspected that natural rubber had been utilised by previous civilisations for many thousands of years.



Native range of *Hevea Brasiliensis*

It is however further south in the Amazon rainforests of modern Brazil, where the latex-producing tree *Hevea Brasiliensis* grows native, known more commonly as the rubber tree or rubber plant. Throughout this region, the Maya and Aztec civilisations continued to harvest natural rubber for centuries. As comparatively scientific and inquisitive civilisations, they developed primitive methods to improve material durability by combining the rubber with juice from common vines.

The archaeological evidence of rubber cultivation is prevalent for these civilisations, with a significant number of ancient rubber balls in particular having been discovered. A metaphor for good and evil, their ballgames were often more brutal than playful. Notoriously, it is thought games often ended in human sacrifice, including instances of particularly grisly ritual decapitation. For more genial purposes, they also used natural rubber to make containers and to waterproof textiles by impregnating the natural latex into the fabric. There are even accounts of Aztec rubber sandals, although these have yet to be confirmed by archaeologists.

However it wasn't until the arrival of European explorers that this extraordinary natural substance generated any global curiosity. When Christopher Columbus returned to the Spanish court with a rubber ball from Hispaniola (modern day Haiti) in 1493, a royal historian recorded, 'I don't understand how when the balls hit the ground they are sent into the air with such incredible bounce'.

Similarly, when Hernan Cortés returned from his conquest of Mexico in 1528, his countrymen sat spellbound as two teams of Aztecs volleyed the elastic ball back and forth before them. Until then, the Europeans had used leather spheres filled with hair, feather and air to play early version of tennis and football. It was obvious to all present that the two prototypes were markedly distinct in quality and kinetic performance.

It is testament to the potential value of natural rubber that the Spanish court were so mesmerised by such a simple object. Amongst the treasures and riches of the New World, including an exotic chocolate drink made from cacao beans, here emerged a humble item that would eventually pave the way for the global cultivation of rubber.

Although the Spanish deemed the original Aztec sport a heathen pastime and subsequently banned it in 1585, the legacy of this ancient game surrounds us. From tennis to basketball to football, rubber is still an essential element of the balls used to play the major sports of today.



2500BC - 400BC
First known civilisation to form in Latin America

Olmec



250BC - 900AD
Developed in what is now known as the Yucatan Peninsula

Maya



1200AD - 1521AD
Built their capital in present-day Mexico City

Aztec



1438AD - 1533AD
Developed in the Andes Mountains in what is now Peru

Inca