Hands On Learning
with Reading Museum Service

COCONUT G52

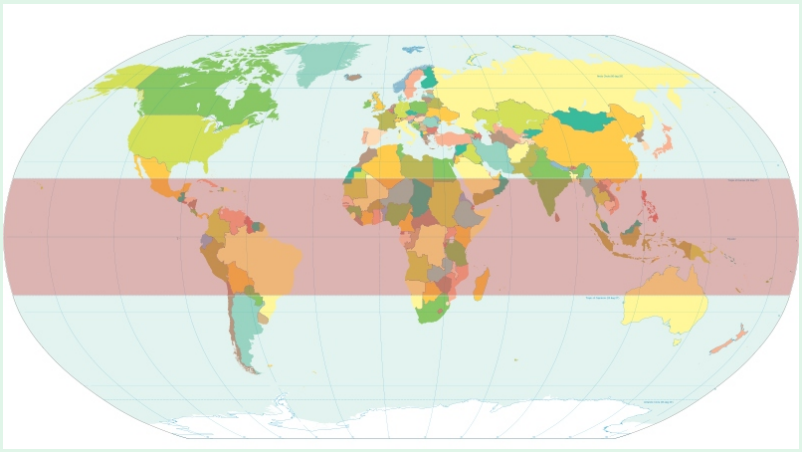
Think of a coconut palm and these tropical images are probably the first that spring to mind:







Coconut palms (*Cocos nucifera*) can be found growing throughout the tropical areas of the world (shown in red on the map below). Amazingly, almost every part of the tree can be used. In the Malay language, the coconut palm is called *pokok seribu guna* - the tree of a thousand uses, and in the Philippines it is called the tree of life.



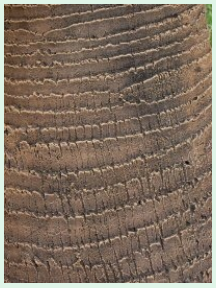
Reading Borough Council

Heritage Lottery Fund

Hands On Learning
with Reading Museum Service

COCONUT G52

The tree



The branchless trunk has ringed scars left over from old leaf growth, as shown in the picture on the right.

The tree can grow up to 30 metres high and the wood from the trunk is very tough and dense. It is used for many things such as building houses and making furniture. Palm trees bear fruit until they are about 70 years old. After that, they are cut down to make way for younger trees. Environmental campaigners have been promoting the use of wood from these old palms to save endangered hardwood trees from being cut down in rain forests.



The elephant in the box is carved from coconut palm wood. You can tell this is an Indian elephant because it has small ears and two humps on its head. The African species has larger ears and a smooth head. Because of this, we can say that the wood that this elephant is carved from most probably came from tropical Asia rather than tropical Africa.

The palm leaves are feather-shaped and can be used for weaving, thatching and matting.







The young flower stalks contain a sugary sap, which can be turned into an alcoholic drink.

Hands On Learning
with Reading Museum Service

READING MUSEUM SERVICE

COCONUT G52

The nut



Each tree produces up to 75 nuts a year, but they can be very difficult to harvest. In Indonesia and Thailand the macaque monkey has been trained to climb up and collect the nuts!

Look inside the coconut and you will notice a fibrous cushion surrounding the smaller hard shell (pictured on the right). This fibre is turned into material called coir and used to make ropes and mats. There are several examples in the box.



India is the world's largest producer of coir. There are many plantations across India, which produce about 9 million tons of coconuts every year. Coir has become very popular across the world because it is the only natural fibre that can resist damage from salt water.





The inner shell is perhaps the most familiar to us. It can be burned for charcoal or turned into cups and bowls. The two halves are often banged together to imitate the sound of horses hooves!



The inside of the shell is lined with a white, edible layer called the meat. Look at the picture on the right to see what this looks like. The meat is believed to have many healing properties and is prepared in several different ways.



Desiccated coconut is made by washing, steaming and shredding the meat. It is used all over the world in baking.

Coconut cream or milk is made by pouring water over the fresh meat and then squeezing out the liquid. It is often added to curries to give a delicious creamy texture. In Britain it is usually bought in a can, like the one on the right.



When the meat is dried it is called copra. There is a sample in the small pot - look how brown it is compared to the picture of the fresh white meat on page 3. There is also some copra still in one of the shells. Oil can be extracted from the copra and products can also be made from it, like soap and cattle cake (animal feed).







There is a hollow in the centre of the meat, which is filled with a sweet tasting water. This provides a refreshing drink.

If you want to see palms growing in this country, good places to visit include Kew Gardens in London, the Eden Project in Cornwall and the University of Oxford Botanical Garden. Of course they need to be grown in special greenhouses as the British climate is far too cold.



The Palm House at Kew Gardens