

## TREES

Activity last approx 1 – 1 ½ hours.

To set the theme: Complete the wordsearch puzzle and/or  
Make a list of the trees you might see around the camp site.

Make a list of all the things that trees and wood are useful for

Go around the camp site and look for leaves and seeds/nuts.

Make bark rubbings of the trees

Take them back to the resource centre and try to identify them using the books, posters and information cards available.

Put together the bark rubbings, pictures of tree silhouettes, leaves, seeds and fruits and information for each tree.

Try the following activities:

Measure the height of a tree.

Count the rings of a log to find out the trees age.

Try and find out which woods are good for burning, for backwoods cooking etc.

Resources available in the resource centre/around the camp site: books, information cards, posters, logs.

Suggested resources for the participants/organisers to bring: pencils, pens, colours, paper, wax crayons for rubbings, downloaded wordsearches, camera, glue/sticky tape.

# British Trees



## Words to find:

beech, copperbeech, douglasfir, elm, hawthorn, hazel., holly, horsechestnut, laurel, lime, monkeypuzzle, oak, pussywillow, rowan, scottspine, silverbirch, sweetchestnut, sycamore, walnut, weepingwillow, yew.



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### HOW CAN WE TELL THE AGE OF A TREE?

The traditional way of estimating a tree's age is to count the number of annual rings in its trunk. Trees grow in height, in width and in depth. The trunk becomes thicker, adding a new layer of wood beneath the bark each year. These layers form concentric rings – and so, by counting these rings, we can find out the age of a tree. The thickness of each ring also indicates the weather conditions in which it grew. The rings are wider in the case of rain and sun, thinner if the tree has suffered drought.

However, measuring in this way cannot normally be done until the tree has been cut down. Dendrologists (tree scientists) use special drills to take thin cores from living tree trunks so that the annual rings can be counted, but tree expert Alan Mitchell came up with a much simpler way of estimating ages. After studying and measuring huge numbers of trees of many different species, he discovered that most fully-crowned trees – those with plenty of space around them – increase the circumference of their trunks by about 2.5cm (1 inch) every year. This is true for almost all species, although some poplars and exotic conifers grow at about twice this rate and Yew trees grow much more slowly.

So, by measuring the circumference of the trunk, you can get a fair idea of the age of a tree. A tree with a circumference of 250 cm (about 100 inches) is likely to be about 100 years old. For the greatest accuracy, the measurement should be taken 1.5 metres (about 5ft) above the ground.



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### ESTIMATING TREE HEIGHTS

The height of a tree has little bearing on identification because it varies so much with the soil and local climate, and also with the proximity and density of the surrounding trees. It is, nevertheless, interesting and instructive to record the heights of trees in various areas.

There are several ways of estimating heights and the simplest is described below

It requires nothing more than a straight stick equal in length to the distance along your outstretched arm from your eye to the tip of your thumb.

Holding the stick vertically in front of you between thumb and forefinger, move backwards or forwards until you reach a point at which the top and bottom of the tree appear to coincide with the top and bottom of the stick. At this point, your distance from the base of the tree is equal to the height of the tree.

Pace out your distance from the tree to find out what the height is.

If you want to check the accuracy of your measurements, try the method with a church tower or some other building with a known height.

