

What is a forest? The definition of a forest has changed over the years.

Historically a forest was a woodland area usually owned by the sovereign, kept for hunting, and having its own laws. Some of England's great forests had their origins as royal hunting grounds – Sherwood Forest, Hatfield Forest and the Royal Forest of Dean, for example. We now tend to think of a forest as any large area covered chiefly with trees and undergrowth – a place for timber production, recreation and wildlife.

Many 'new forests' have sprung up in recent years such as the Great Western Forest centred around Swindon, Thames Chase Forest in Essex and the Red Rose Forest in and around Manchester.

These new forests have been developed as community forests in response to an increased desire for local recreational areas and concern for the future of the environment. There are twelve community forests, go to: www.communityforest.org.uk/ to find your nearest one.

A forest is different from a wood simply as it covers a greater area of land. A copse is different again in that a copse is a wood comprising of coppiced trees – trees that are cut down to their stumps at a regular interval and allowed to grow up again, thus providing a continuous supply of firewood and small timber for uses such as fencing and tool handles.

A forest is a diverse place. It is home to a complex ecology of plants and animals interacting and coexisting. Into this mix come people with their own needs and desires. Forests cannot be considered to be entirely natural; they have for so long been managed by people.

Forests in Britain

When the great ice sheets of the last ice age retreated from Britain, 12,000 years ago, the country was attached to mainland Europe and tree species quickly spread northwards to colonise this virgin territory. With them came animals and flowering plants as well as early people who hunted and gathered food in the primordial forest that covered most of the landscape.

Ten thousand years ago the British Isles became separated from mainland Europe. Any trees, plants and animals that had already arrived are now known as 'native' or 'indigenous'. Since that time many trees, plants and animals have been introduced by people; examples include rabbits introduced by the Normans, the grey squirrel introduced from 1876 onwards and the sweet chestnut tree believed to have been introduced by the Romans.

Over several thousand years, waves of settlers arrived on these islands bringing increasingly sophisticated technology; stone tools were followed by bronze, which were followed by iron. The primordial forest was cleared, starting on the thin

soils in upland areas of chalk and limestone and moving down into the clay valleys and lowlands as ploughs became stronger. By 1066, when the Normans arrived, it is estimated that only 15% of the British Isles retained its tree cover.

This figure dropped to about 5% at one time and now stands at about 8%. The demands of increasing population over the last 1000 years and the emergence of industrial scale technologies and communities have been the key causes of forest decline.

The Forestry Commission

The Forestry Commission (FC) is the government department responsible for the protection and expansion of Britain's forests and woodlands. It was set up in September 1919 as a result of the difficulties Britain experienced meeting demand for timber during the First World War – particularly for trench warfare.

Initially the Commission's brief was to rapidly expand timber production and it was given a great deal of power to acquire land for this purpose. Britain's forests took another pounding during the Second World War and the FC was there to build timber production back up during the 1950s and 1960s.

Since the 1970s the FC has undergone a transformation that is still going on: conservation and amenity issues have become more central to the work of the Commission – and this brings new challenges.

Recreation versus Conservation

The FC mission statement says, 'Our goal is always to ensure that, at a practical level, Britain can use its forests to contribute positively to as many of the nation's needs as we can while sustaining this great resource for the future.'

Increasingly people see forests as places to escape from the hustle and bustle of their busy lives. Campers, cyclists, orienteers, bird watchers, walkers, artists and musicians, paintballers – everyone wants a piece of the forest. Since the 1970s, the FC has worked to accommodate all these interests and at the same time has increased timber production from four to nine million cubic metres per year.

Britain currently imports around 85% of its timber, paper and other wood products.

With growing concerns about climate change and local sourcing of resources the Forestry Commission is aiming to increase timber production to fifteen million cubic metres by 2020. At the same time more people will learn about forests through FC education projects and more will want to visit forests. The wildlife of the forest will also need to have its place valued and considered. The challenges that face our forests are many fold.

A brief history of the New Forest

In 1079 William I declared a large area of what is now south west Hampshire 'Nova Foresta', his new hunting ground. 'Foresta' means hunting ground and now what we understand as 'forest'. Although principally a playground for the rich and famous, including William II who died there mysteriously whilst hunting in 1100, the New Forest has always been important for timber production.

Timber production increased during the thirteenth to fifteenth centuries as demand for building materials grew.

The first recorded felling of timber for the Navy was in 1611. Throughout the Stuart period there was increasing conflict between the rights of commoners and the demands of the Navy. Commoners' rights to graze animals, cut firewood and dig marl for building increasingly gave way to demands by the Navy for more timber for ships. Land was increasingly enclosed and access to commoners denied. In 1698 William III allowed the enclosure of a further 6000 acres for growing navy timber.

Buckler's Hard became the centre of shipbuilding in the forest in 1745. Nelson's favourite ship, the Agamemnon, was built there at a cost of £24,000 in 1781, involving the felling of 3000 oak trees.

Deer grazing on young trees and stripping bark from more

mature trees became an increasing problem for a forest so intent on producing timber and in 1851 the Deer Removal Act was passed with an aim to eliminate all deer. This never succeeded, and there is now a large population of deer in the area. At the same time the rights of commoners on unenclosed land were strengthened in law. These rights were to be maintained by the Court of Verderers, an organisation still in existence today.

In 1877 the New Forest Act was passed preventing the further enclosure of land by the Crown. The Forestry Commission took over the running of the forest from the Office of the Woods in 1923. Initially the focus was on maximising timber production.

In 1949 an amendment to the New Forest Act began to shift the focus to conservation and in 1969 the New Forest became a National Nature Reserve.

Attempts throughout the 1990s to establish the New Forest as a National Park finally succeeded and in March 2005 the New Forest became the eighth National Park in England – the first one created in nearly fifty years. The New Forest National Park Authority took up its full powers in April 2006.

The New Forest today is a vibrant place where meeting the challenge of producing timber, accommodating a wide variety of interest groups and protecting wildlife is the order of the day.

New Forest Facts

- The New Forest covers 145 square miles
- In 2006 there were 4204 ponies, 2572 cattle, 617 pigs, 110 donkeys and 41 sheep, grazing in the New Forest under historical commoners' rights. These animals are known as depastured stock
- In 2006, 87 commoners animals were killed and 44 injured in road accidents
- Timber production is sixty thousand cubic metres per year
- 121,000 trees were planted in the New Forest in 2002/2003
- 13.5 million visitors a year are attracted to the forest
- In 2001 there were 650,000 camper nights

For more information and fact sheets on the New Forest go to <http://www.forestry.gov.uk/forestry/>

Visiting Forests

As part of a study of the life and importance of forests it is essential that children are given the opportunity to visit a forest or a woodland – or, at the very least, a local park or school grounds with some trees! It is only through experiencing something of the life of trees and forests that children can develop a real understanding of just how valuable forests are – for recreation and conservation.

Health and Safety

Your school and your Local Authority will have in place Health and Safety policies and documentation, which you are responsible for following when taking children on educational visits. Contact the landowner for information and a pre-visit to the site is also beneficial.

Nature Games

The following ideas have been adapted from *Sharing Nature with Children* by Joseph Bharat Cornell.

Unnature trail

Without the children seeing, lay out a collection of 10 or 12 unnatural or unexpected objects along a 50 metre stretch of path: hang a salt cellar or a metal spoon in a tree, place a banana in the long grass, a toy car, a plastic ball, an inflated balloon and so on. Slightly hide the objects so the children really have to look for them. Make some of the objects more conspicuous than others. Don't tell the children how many there are; simply ask them to walk along the path and look out for anything that doesn't really belong there.

Once everyone has walked along the path, find out who spotted the most objects.

Discuss each object; what is unnatural about it, how well is it camouflaged? Follow this game with a search for camouflaged mini-beasts.

Meet a Tree

This game is best played in a woodland setting. A local park would work well as long as there were a variety of trees.

Put the children in pairs. One is blindfolded and their partner carefully leads them on a circuitous route to a tree.

The blindfolded child explores the tree thoroughly with their hands. They can also hug the tree to get a sense of its size. The child is then led back by another route to the starting point. The blindfold is removed and the child has to try and find their tree using sense of direction and feel. Suddenly what

was just a bunch of trees becomes a collection of individual trees with one special one waiting to be found.

Blindfold Trail

Lay out a long piece of string, maybe 50 metres, through the place you want to explore; over fallen logs, round trees, over stony ground, through long grass. Make the string rise and fall by attaching it to low hanging branches or weighting it down with a stone. The whole class is blindfolded and each child takes hold of the string and sets off on an adventure to experience a familiar place in an unfamiliar way. Retrace the trail without blindfolds to help put the experience into perspective.

Micro-hike

This is great fun! Cut string into one metre lengths and give each child a piece of string and a magnifying glass to shrink them down to the size of an ant. The children lay the piece of string out, either in a straight or wiggly line, and lay down on their fronts to explore the route with the magnifying glass. It really is amazing what is down there in the roots of the grass.

Silent Sitting

This is a powerful activity and involves a class of children gathering in a circle and lifting their hands up to symbolically pull down a 'veil of silence'. They then join hands in a long snake and are led along a forest path by their teacher. The teacher silently indicates where each child should sit. Children sit about ten metres apart and it is a good idea to have an adult at the beginning and end of the line as well as a couple in the middle.

Everyone is left to listen, look, smell and touch around them before silently coming back together after about fifteen minutes to return to a circle and lift the veil. When the veil is lifted there is a sudden outpouring of talk as the children all share their experiences. This works particularly well at dusk on a residential trip. Children have been known to see deer grazing or to be visited by small birds whilst silently sitting still in a forest location.

Nature Activities

Seed collecting and planting

Take advantage of being in a forest to collect fallen tree and shrub seeds, such as acorns, conkers, ash keys, hawthorn berries etc. Take these back to school to start your own tree nursery.

Have fun in the Forest

Continued

Children will be fascinated to see their seed grow into a small tree. Ensure you have a permanent site that the tree can be moved to when it is about 30 to 45 cm high so that it can grow and thrive and go on to produce seeds of its own and complete the cycle. Thirty free trees and a planting guide are available for schools from the Woodland Trust <http://www.naturedetectives.org.uk/trees> and they also provide free seeds.

Celebrating trees

The environmental arts charity, Common Ground, has lots of ideas on creating community woodlands and celebrating trees in your local area. They organise annual events such as Apple Day in October and Tree Dressing Day on the first weekend in December. Visit www.commonground.org.uk/ to join in and celebrate your local trees.

Natural art and sculpture

Whilst in a forest location children can collect the fallen leaves, twigs, fir cones, stones and so on from the forest floor to create their own artworks. After an hour of creating groups can tour the 'gallery' to see what other children have come up with. Take photographs and, back in school, produce your own gallery brochure.

Your artwork will, of course, disappear back into the forest floor over time and this presents an opportunity for discussing biodegradability of materials and the temporary and permanent aspects of nature. Search for images of the environmental art of Andy Goldsworthy on Google images for inspiration. Take inspiration from creatures you find on a woodland floor - MINIBEASTS.

Threats to Forests

To the New Forest

In April 2004, campaigners won their fight to stop a huge super port being built at Dibden Bay, near the New Forest in Hampshire. The £600m plan was opposed by Hampshire County Council and Friends of the Earth but supported by Southampton City Council who said it would bring many new jobs into the area. The government still believes port capacity needs to expand.

www.foe.co.uk/pubsinfo/briefings/html/20011214175831.html

Traffic problems grow as more and more people visit the New Forest. Forestry and tourism officials are having to develop new traffic management plans to cope.

www.thenewforest.co.uk/car_free.html

Litter is unsightly and unhealthy; it mars the natural beauty of the National Park and poses a risk in the New Forest to animal as well as human health. A major clean-up campaign and a new 'Forest Force' was launched in 2007 when a week of activities was organised to initiate a major clean up of the forest. www.forestry.gov.uk/forestry/

To Forests in General in Britain

Urbanisation continues to nibble into the boundaries of forests, although with growing environmental awareness planning applications are usually strongly resisted. www.geography.learnontheinternet.co.uk/topics/urbanisation.html

Grey squirrels continue to be a threat to growing trees and it is estimated that they reduce the value of tree crops by £10 million each year. The Forestry Commission currently spends £135,000 annually on research into controlling them. www.forestry.gov.uk/greysquirrel

To Forests in General around the World

Deforestation through logging in rainforests destroys the habitat for countless species of animals and plants, many of which have been driven to extinction through the action of people. Clearing trees also opens up bare land, which is more vulnerable to erosion by heavy storms. This can lead to mudslides destroying villages and loss of human life. www.worldwildlife.org/forests/

Grazing prevents the regrowth of forests.

www.rainforestlive.org.uk/

Pest and disease patterns around the world have changed with the importing of non-native tree species and will continue to do so as the climate changes.

www.fao.org/forestry/en/

Opportunities for Sustainable Development of Forests

The answer to many of these threats is sustainable forestry. A widely-used international definition of sustainable development is: Development which meets the needs of the present without compromising the ability of future generations to meet their own needs.

Sustainable development projects meet four criteria:

- Social progress which recognises the needs of everyone
- Effective protection of the environment
- Prudent use of natural resources
- Maintenance of high and stable levels of economic growth and employment.

Go to www.forestry.gov.uk/sustainableforestry for details of what the Forestry Commission is doing to promote sustainable use of Britain's forests.

Sustainable forestry in Britain

Biodiversity is the term given to the total diversity and variability of life on Earth and of the natural systems of which we are all part. Conservation of biodiversity is an integral part of sustainable forestry

www.forestry.gov.uk/forestry/edik-59kif5

Woods for People is a joint project between the Woodland Trust and the Forestry Commission and aims to improve access to woodlands. Research shows that accessible woodland is rarely situated near to areas of social deprivation. However, recent tree planting initiatives have focused on woodland creation in exactly these areas. This is an example of sustainable forestry addressing the social dimension.

www.woodsforpeople.info/ and

www.forestry.gov.uk/website/oldsite.nsf/byunique/ahen-5hzd3r

Sustainable forestry around the world

Certification of forest products from rain forest areas is one solution being adopted to ensure that forests are managed sustainably. The Forest Stewardship Council (FSC) certificate is one such initiative. Go to

www.rainforest-alliance.org/ / or www.fsc-uk.org

for details of certification around the world.

Protecting indigenous people and supporting their sustainable lifestyles will help protect the future of rain forests. Visit www.rainforestfoundationuk.org

for information on projects and campaigns to support forest people around the world.

Continued

Your School Forest

Your school can be part of the solution by creating your own woodland in your school grounds. The following organisations will give you advice and help on establishing tree cover:

Learning through Landscapes is the national school grounds charity, campaigning on behalf of all children for better outdoor environments in education and childcare.

www.ltl.org.uk/

With 47 county based groups and 670,000 members The Wildlife Trusts is Britain's biggest voluntary organisation. Visit **www.wildlifetrusts.org/** to find your county contact details. Wildlife WATCH is the junior wing and many schools already run affiliated groups.

The British Trust for Conservation Volunteers provide practical support to local conservation projects all over the country and around the world. **www.btcv.org.uk/**

Free trees and seeds plus planting and care information from the Woodland Trust. Register online to receive a free pack by post at **www.naturedetectives.org.uk/trees**