

# NATURAL HERITAGE

(2009)  
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## TREES

Trees and other plants are primary producers: they produce food in their leaves by photosynthesis, using energy from sunlight to combine carbon dioxide from the atmosphere with water from the ground to make sugars. These sugars are the beginning of the food chain on which all other forms of life depend.

## HISTORY OF WOODLANDS

Woodland began to develop in Ireland over 10,000 years ago at the end of the last ice age. The first woods were composed of hardy species like birch, hazel, rowan and Scot's pine. As the climate gradually improved, mixed woods of oak, ash, hazel, alder and willow grew to dominate the lowland landscapes.

Neolithic settlers first entered Northern Ireland around 7,000 years ago and began to clear small areas of forest for timber and farmland. Even around 1600 AD dense forests still covered large areas on the north-west and south sides of Lough Neagh and along the Bann, Erne basin, Lagan Valley and east Antrim coast.

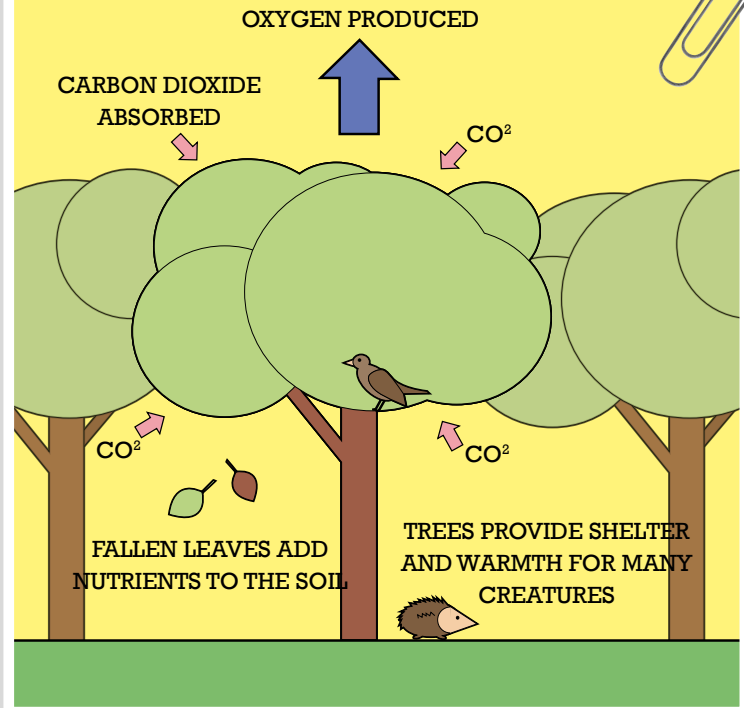
When industry began to expand from 1600 AD onwards, wood was required for ships, barrels, housing and charcoal. Bark was also needed in large amounts for tanning leather. By 1800, commercial exploitation of woodlands had cleared most of the once extensive forests.

Today, less than 8% of Northern Ireland is wooded, which is lower than many of our European neighbours.

## THE IMPORTANCE OF TREES

- They provide shelter from sun, rain and wind.
- They enhance the landscape and help to screen ugly buildings.
- They help to reduce air pollution.
- They produce oxygen and absorb carbon dioxide.
- Fallen leaves add nutrients to the soil.
- Woodlands provide cover and shelter for many of our native species of plants and animals.

## THE IMPORTANCE OF TREES



BIRCH



ROWAN



SCOT'S PINE

In general, native broadleaves such as oak and willow, support more insects than non-native species such as beech or sycamore. One exception is the native holly, whose tough leaves are unpalatable to many insects. However, holly produced berries that are a valuable winter food for thrushes and other birds.

### CHOICE OF TREE

The choice of tree should depend upon:

1. physical conditions at the site, eg, soil type, drainage and exposure.
2. the space available for the tree's eventual height, crown size and root spread.
3. the suitability of the species in the landscape. In a rural setting, ornamental garden trees and shrubs should be avoided.

Look to see which types of tree grow well in your area, and use them as a guide. If possible, it is better to plant stock which originates as seed or cuttings from nearby native woodlands because local trees are more likely to grow successfully with minimal maintenance.

### WHEN TO PLANT

Planting is carried out when the trees are dormant from November to March, but not when the soil is frozen or waterlogged. Container grown trees can be planted throughout the year if they are well watered after planting.

### SIZE OF TREES

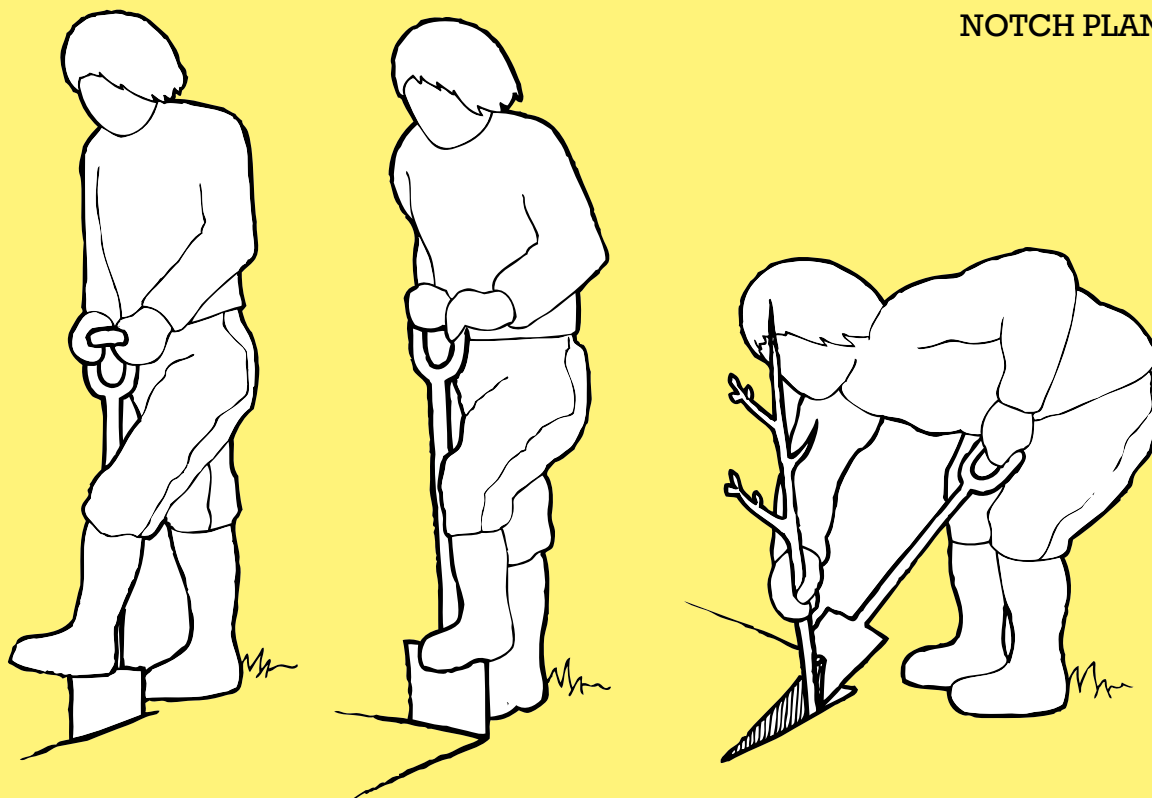
The most common sizes planted are bare-rooted whips and feathered whips because they do not need stakes, and should grow quickly. They are also cheap to buy and easy to transport.

Trees should be planted as soon as possible after purchase. Until the tree is planted, the roots should be protected from drying out by covering them with plastic or placing them in a trench and covering with soil.

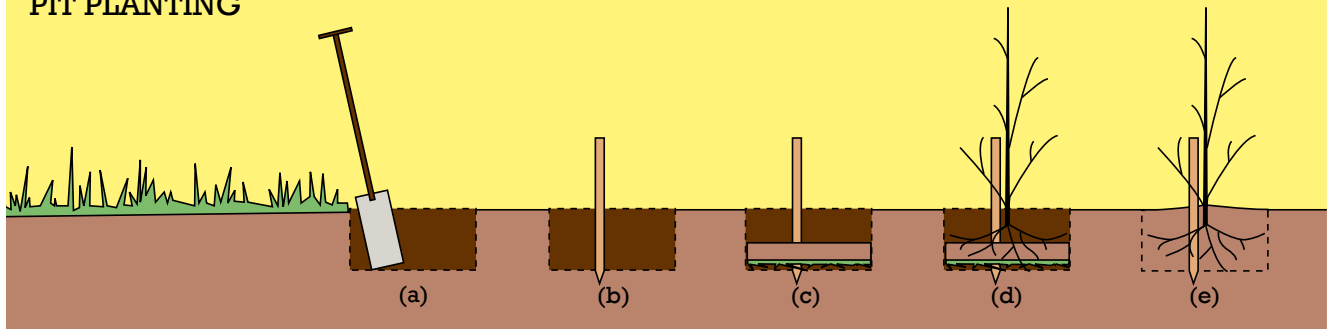
### NOTCH PLANTING – for bare-rooted whips

- Make two cuts the full depth of the spade in an “L” shape.
- Lever up a triangular section of soil and grass.
- Insert the roots of the tree into the cut and firm down the soil around it.
- Heel the soil down firmly around the base of the tree.

### NOTCH PLANTING



## PIT PLANTING



### PIT PLANTING – for small standards

- Dig a hole large enough to hold the entire root system (a)
- Drive a short stake into the hole (b)
- Place the top sod grass-downwards in the hole (c)
- Carefully place the tree in the hole at the same depth that it was planted in the nursery (d)
- Put the soil back, best first (e)
- Gently shake the tree to get the soil well settled around the roots.
- Trample the soil firmly around the tree.
- A mulch plated around the base of the tree will reduce weed growth.

### MAINTENANCE

The tree will need attention in the first four years after planting.

- Remove weeds and rubbish from around the base of the tree, and water regularly.
- Cut back broken or diseased branches to a strong shoot.
- Repair or replace broken ties and stakes if they are still required. Adjust ties as the tree grows.
- Tree shelters (sometimes called Tulley tubes) can help to establish trees in exposed areas and will protect them from rabbit damage. They are made of reinforced plastic which should biodegrade after 5 years.

### TREE PLANTING GRANTS

A range of grants are available to farmers, schools and members of the public towards planting trees and restocking woodlands.

Farmers who wish to plant trees for shelter or in hedgerows or to fence existing broadleaf woodland may be eligible for the Farm and Conservation Grant Scheme.

Landowners seeking grants for planting trees on of land over 0.2 hectares should apply to Forest Service.

### ORGANISATIONS TO CONTACT

COUNCIL FOR NATURE CONSERVATION & COUNTRYSIDE TREE COMMITTEE  
C/o Calvert House  
23 Castle Place  
BELFAST  
BT1 1FY

CONSERVATION VOLUNTEERS (NORTHERN IRELAND)  
The Pavilion  
Cherryvale Playing Fields  
Ravenhill Road  
BELFAST  
BT6 0BZ

COUNTRYSIDE MANAGEMENT DIVISION  
Department of Agriculture (NI)  
Dundonald House  
Upper Newtownards Road  
BELFAST  
BT4 3SB

FARM 7 CONSERVATION GRANT SCHEME  
Department of Agriculture (NI)  
Magnet House  
81-93 York Street  
BELFAST  
BT14 1AD

FOREST SERVICE  
Department of Agriculture (NI)  
Dundonald House  
Upper Newtownards Road  
BELFAST  
BT4 3SB

## TREE PLANTING

MEN OF THE TREES  
20 Birchwood  
OMAGH  
BT79 7RA

Please enclose an A4 sized stamped address envelope when asking for information.

For small areas of land less than 0.2 hectares within Areas of Outstanding Natural Beauty, NIEA may offer grant towards tree planting. In other areas, grants may be available for countryside projects that involve tree planting or the management of existing broadleaved woodlands in order to create or improve wildlife habitats. Normally only broadleaved trees will be considered, and the emphasis should be on native species. These grants are available to local authorities, voluntary bodies, schools, community groups, landowners and farmers.

### FURTHER READING

Planting Native Trees and Shrubs -  
*Beckett, G + Beckett, K (1979).*  
Publisher: Jarrold, Norwich.  
ISBN 0 85306 911 9.

A Practical Conservation Handbook -  
*Brooks, A. (1988).* Woodlands: Publisher: British Trust for Conservation Volunteers, Wallingford.  
ISBN 0 9201643 7 2.

Trees: Countryside Management Booklets -Department of Agriculture for Northern Ireland (1991). Publisher: DANI.

A Field Guide to the Trees of Britain and Northern Europe -  
*Mitchell, A. (1988).*  
Publisher: Collins, London.  
ISBN 0 00 219213 6.

In a Nutshell: A manifesto for trees and a guide to growing and protecting them - *Sinden, N. (1989).*  
Publisher: Common Ground, London.  
ISBN 1 870364 04 X.

Our aim is to protect, conserve and promote the natural and built environment for the benefit of present and future generations.

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