

TREE SPECIES SELECTION

CALU FACTSHEET

February 2009

Ref: 050206



When choosing a tree for a site it is important to take into consideration a combination of site factors (e.g. soil type, soil depth, exposure) and objectives (e.g. is the wood primarily for habitat creation, for fuel wood production, timber production or shelter). It isn't possible to provide a definitive list of the "best" trees for different situations, but the following tables provides some general information on the site requirements for the most frequently planted trees in Wales.

CONIFERS

Species	Site requirements			Approximate rotation length (years) for timber
	Soil	Light	Exposure	
European larch <i>Larix decidua</i>	Moist, well drained, fairly fertile	Light demanding	Intolerant of salt winds and excessive exposure. Windfirm	50-55
Japanese larch <i>Larix kaempferi</i>	Moderately fertile (less demanding than European larch)	Light demanding	Tolerant of salt winds and fairly resistant to exposure and pollution. Windfirm	45-50
Norway spruce <i>Picea abies</i>	Undemanding	Moderately shade tolerant	Intolerant of salt winds and smoke. Not completely frost hardy. Liable to windthrow on shallow soils	70-75
Sitka spruce <i>Picea sitchensis</i>	Undemanding	More light demanding than Norway spruce	Tolerant of salt winds and exposure. Fairly resistant to smoke and pollution. Prone to windthrow on shallow or wet soils	55-60
Scots pine <i>Pinus sylvestris</i>	Light	Light demanding	Frost hardy. Intolerant of extreme exposure. Windfirm	75-80
Douglas fir <i>Pseudotsuga menziesii</i>	Deep, well drained, fertile	Moderately shade tolerant	Susceptible to frost and exposure. Intolerant of smoke and pollution. Moderately windfirm	55-60



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BROADLEAVES

Species	Site requirements			Approximate rotation length (years) for timber
	Soil	Light	Exposure	
Sycamore <i>Acer pseudoplatanus</i>	Undemanding	Moderately shade tolerant.	Fairly frost hardy. Tolerant of exposure & pollution. Very windfirm	45-50
Silver birch <i>Betula pendula</i>	Undemanding, but prefers drier	Light demanding	Frost hardy & tolerant of exposure. Windfirm	45-50
Downy birch <i>Betula pubescens</i>	Undemanding, suitable for wetter soils	Light demanding	Frost hardy & tolerant of exposure. Windfirm	45-50
Sweet chestnut <i>Castanea sativa</i>	Good drainage; moderately fertile	Shade bearing when young, but needs more light as matures	Frost tender; intolerant of exposure. Windfirm	75-80
Beech <i>Fagus sylvatica</i>	Well drained; likes soils over chalk and limestone	Shade tolerant	Susceptible to frosts; tolerant of smoke. Fairly windfirm, except on shallow soils	90-95
Ash <i>Fraxinus excelsior</i>	Moist, but well drained; fairly fertile	Shade tolerant for first five or six years, then very light demanding	Frost tender, but most native origin trees are sufficiently late into leaf to avoid spring frosts. Windfirm	45-50
Cherry <i>Prunus avium</i>	Deep, well drained soils, preferably over chalk or limestone	Light demanding	Frost hardy, but not tolerant of exposure. Moderately windfirm	45-50
Sessile oak <i>Quercus petraea</i>	Well drained, moderately fertile	Light demanding	Hardy and windfirm	90-100
Pedunculate oak <i>Quercus robur</i>	Moderately fertile, thrives in quite heavy soils	Light demanding	Moderately susceptible to frost. Windfirm	90-100

The Forestry Commission should be consulted before any new planting of woodland is undertaken. An Environmental Impact Assessment will most probably be required for any planting larger than two hectares in sensitive areas (e.g. National Park, Area of Outstanding Natural Beauty) or five hectares elsewhere.

Whilst every effort is made to ensure the information provided in this leaflet is correct, CALU cannot be held responsible for the consequences of any actions taken on the basis of its content.

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