

# Wider application

This approach to woodland planting can be repeated on any poor quality, uncontaminated derelict site. The costs are very substantially lower than is usually the case for more formal, ornamental urban greening (1/50th-1/100th of the cost) and so a great deal more could be achieved within existing budgets.

The relatively low cost of such woodland also means that some of it can reasonably be sacrificed at a later date if there is an overriding demand for development on the site.

# Further information

This leaflet is one of a series produced by the National Urban Forestry Unit. NUFU provides a national focus for the exchange of information and good practice in urban forestry.

If you would like further information on other case studies or their application, or if you have examples of good practice to share with others, please contact:

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# Cost effective woodland planting on derelict land

## Introduction

Urban areas contain a great deal of disturbed and derelict land which could support trees and woodland. Combining applied ecology and forestry planting techniques can achieve rapid impact and produce cost effective and sustainable environmental improvement.

## Specific example

### Project name and location

**HOLYHEAD COPSE**, Woden Road West, **WEDNESBURY**, Sandwell, West Midlands, UK  
Grid reference SO 976 955

### Project partners

- Black Country Urban Forestry Unit (BCUFU) now the National Urban Forestry Unit (NUFU)
- Forestry Commission
- Sandwell Metropolitan Borough Council

### Project objectives

To provide an accessible and well monitored example of cost effective woodland establishment on a common type of urban derelict land.

### Site description

The 1.6 ha site is bounded by a trunk road, housing and industry. It is owned by Sandwell MBC, has been opencast for coal and then infilled with a consolidated mixture of inert materials, including concrete, brick rubble, ash and subsoil. A rough grassland community had colonised most of the site, which was crossed by an informal, worn footpath.

### Consultation

Neighbours and ward councillors were leafleted to notify them of the proposals for the site and they were invited to comment.

### Project design

The planting design was undertaken by BCUFU in association with the Forestry Commission. Only 6 species of tree were used (60% pioneer species: grey alder and silver birch; 40% : oak, field maple, wild cherry and hawthorn). 450-600mm bare-root transplants were planted in blocks of 25-50 of an individual species.

### Implementation

No topsoil or other organic material was brought on to the site. Trees will grow perfectly well in most uncontaminated material, provided there is adequate site drainage.

Prior to planting, the site was ripped at 1.8m intervals to a depth of 600mm with a wing-tined plough, in order to relieve compaction and to facilitate root penetration by the young trees. In this case, a crawler tractor was used, as large pieces of concrete were present. On most sites, a less powerful, wheeled tractor would be adequate.



*Tractor-mounted wing tines rip through compacted ground and improve drainage*

The small trees were planted in the rip lines at a spacing of 1.8m in each direction (a density of around 3000 trees / ha). They were not fenced, nor individually protected against animals.

A signboard was erected at each end of the site to give it a clear identity.

The project was implemented in March 1991, at a cost of approximately £2 500 / ha. It was funded through the Forestry Commission Woodland Grant Scheme and Sandwell MBC (through the Government's former Urban Programme).

### Establishment

A strict weed control regime was maintained for 5 years after planting. A 1m diameter circle around each tree was kept weed free by the application of a systemic contact herbicide (glyphosate) once or twice during each annual growing season and the further application of a residual herbicide (propyzamide) in the winter. At the start of the second growing season fertiliser, in the form of rock phosphate, was added in order to counter phosphorous deficiency on the site.

### Management

A management plan has been produced by the Forestry Commission and NUFU, to guide the further development of Holyhead Copse. The plan includes different thinning regimes (including no thinning at all), experimental introduction of more canopy species, such as oak and ash, into some blocks of pioneer species, cutting back of trees along the footpath, maintaining access and provision of detailed interpretation signage.

### Results

- Survival rates over the first 3 years were very high - in excess of 95%.
- Growth rates were excellent. Most of the grey alder were over 2 metres tall by the end of the third growing season, and many of the wild cherry and oak also showed excellent extension growth (up to 1 metre in a single year).
- The whole site was free from vandalism, despite there being public access throughout.
- Some limited vole damage was noted in 1993 and spiral plastic tree guards were then fitted to trees in the affected area.
- Canopy closure was achieved over most of the area within 3-4 years, creating significant visual impact.



*Holyhead Copse, summer 1991*



*Holyhead Copse, summer 1995*