

# Belleisle Park

# Tree Management

## Round 2 Heritage Lottery Fund Parks for People Project

### Introduction

A Tree survey was carried out in relation to the health and condition of tree cover at Belleisle Park, Ayr in late 2012. It relates to 830 trees and groups 190 within the boundary. Smaller trees of less than 15cm stem diameter, and areas of undergrowth are described in general terms, but are not surveyed in detail. Naturalised woodland areas have been surveyed for significant defects and safety considerations only, and not all trees within these areas are recorded. The survey has been carried out in accordance with BS5837:2012 "Trees in Relation to design,

demolition and construction - Recommendations".

Two very large sweet chestnut trees, located between the house and the conservatory, are considerably older and probably date from the late 18th century. Many of the ornamental conifers surrounding the lawn to the west of the house, and those within the lawn to the north of the former nursery, date from the late 19th century during a period when the estate went through a succession of ownerships.

### Population Analysis

Over 70 different tree species have been recorded, which is indicative of a long history of ornamental planting within the estate. 45 different species make up only 11% of the population, typically represented by one or two specimens each. A further 24 species make up 40% of the population. However, there is a heavy reliance on two main species - **beech and sycamore** - which together make up **almost 50%** of total tree cover.

The heavy reliance on beech presents a significant management challenge in the short term. 45% have an anticipated safe life of less than 40 years, and 17% have an anticipated safe life of less than 20 years. In other words, almost half of the beech trees within the park are likely to be lost over the next 40 years. This will have a major impact on the landscape.

When other species' life expectancies are also taken into consideration a significant level of tree cover in Belleisle is likely to be lost within 40 years.

### Management Recommendations

Three large beech trees on the north verge of the entrance drive were identified as infected with root & stem decay fungi which renders the tree liable to brittle fracture & collapse. These trees were removed for safety reasons in March 2013.

The Doonfoot Road woodland belt contains several dead elms which are now in an advanced state of decay these should be felled, or have the upper branches removed to leave a standing dead stem which will provide habitat for invertebrates.

Where major dead wood is present close to footpaths, walls, buildings or roads, a recommendation has been made to remove it. Where complete dead wooding is specified all dead branches, including those of <50mm, diameter should be removed. Where defects are not a serious safety concern at the present time, recommendations may have been made for follow-up inspections, with an appropriate time interval specified.

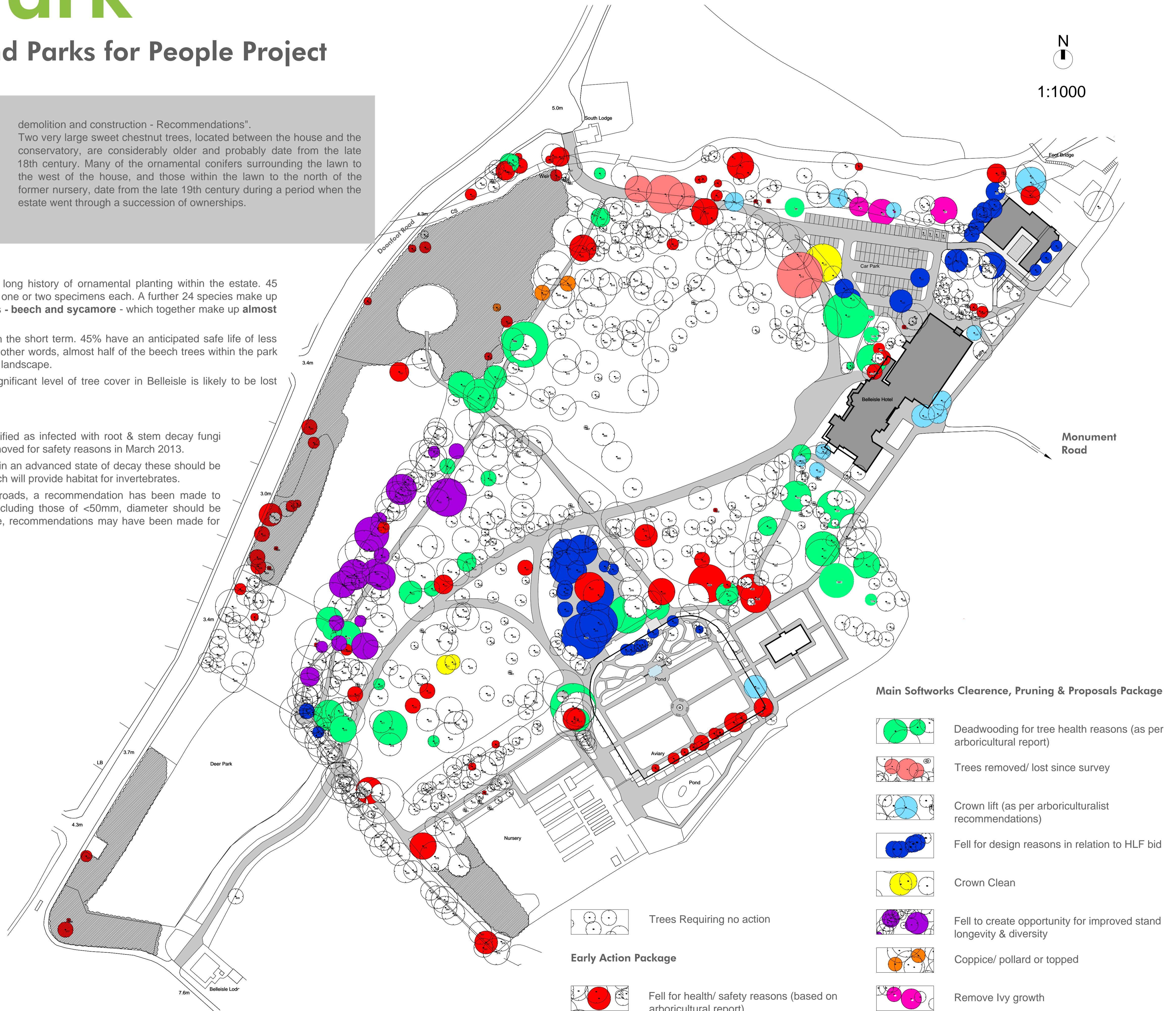
### Woodland Regeneration

There is a need to control the extent of both Rhododendron and cherry laurel within the woodlands. Whilst these species provide some useful screening, definition, and cover for wildlife, they also prevent the establishment of young trees. Within the main woodland areas there is a need to ensure new trees have sufficient light/ space to establish & develop. Without the creation of this the woodlands will become increasingly moribund, leading to disintegration of the canopy cover & loss of woodland character. Control of these shrub species will allow opportunities to establish new trees by planting or natural regeneration.

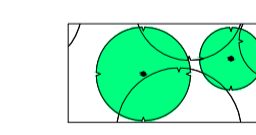
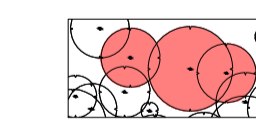
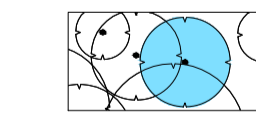
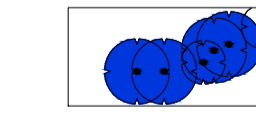
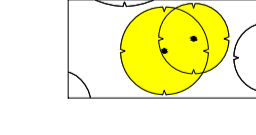

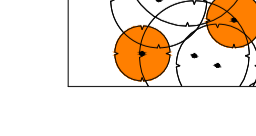
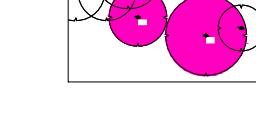
The most critical aspect of woodland management relates to the core beech woodland as it is dominated by mature beech trees, with no young trees or ground cover present due to the dense shade cast during the growing season. Many of the trees are reaching the end of their safe life, without some early intervention it is likely that this area will be lost within 40 years. **It is imperative that underplanting is carried out now in order to establish the next generation of trees.** This will necessitate a **gradual, controlled removal of trees** in small groups to provide sufficient light for new trees to develop.

Several large specimens need to be removed now for safety reasons. Where these trees are removed a further 2 or 3 adjacent trees should also be removed (irrespective of their health and condition) to open large enough gaps for replacement planting to establish. Undertaken in a number of phases, **at around 7-10 year intervals**, removing 20% of the existing trees in each phase. It may be necessary to protect new planting with fencing until trees are properly established. Phased regeneration of the woodland over the next 40 years would be the result. Replacement planting of beech will reflect the original historic landscape.

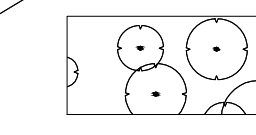
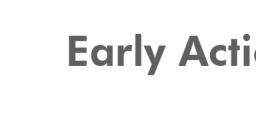
To minimise risk of wind damage, the existing edge trees along the west and south of the woodland should be retained for as long as possible to provide shelter.



### Main Softworks Clearance, Pruning & Proposals Package

-  Deadwooding for tree health reasons (as per arboricultural report)
-  Trees removed/ lost since survey
-  Crown lift (as per arboriculturalist recommendations)
-  Fell for design reasons in relation to HLF bid
-  Crown Clean
-  Fell to create opportunity for improved stand longevity & diversity
-  Coppice/ pollard or topped
-  Remove Ivy growth

### Early Action Package

-  Trees Requiring no action
-  Fell for health/ safety reasons (based on arboricultural report)