

1.0 Abstract

Following a comprehensive invertebrate survey of Chigwell Row it was identified that the pollards (predominantly Hornbeam and Oak) played an essential role as a habitat. In addition to this the failure of certain pollards has identified a need for management.

The purpose of this survey is to provide accurate details of the population of pollards in this wood.

2.0 Instructions

As instructed by Epping Forest District Council Countryside Care a survey of the pollards was undertaken in March 2008.

The survey includes measurements of:

- Tree species
- Height of the bolling
- Total tree height
- Maximum crown spread
- Diameter at breast height
- Percentage functional cambium

In addition to these details a prioritised management plan was undertaken.

3.0 Introduction

3.1 Location: Chigwell Row Wood, Situated to the South of the recreational ground at the junction of Lambourne Road and Romford Road, Chigwell Row, Essex.

3.2 Ownership: The woodland is managed by Epping Forest District Council Countryside Care.

3.3 Site Description: The wood is approximately 14 hectares in size with a rectangular shape running East to West. It consists of a high density of Oak and Hornbeam pollards. On the Northern side of the wood is a recreational playing field and to a small extent a modern housing estate, to the East is a dual carriageway (The Romford Road), on the Southern border the wood is bound by a housing estate and to the West is an abandoned recreational ground.

3.4 Current land use: Recreational use for the public

3.5 Access: Open public access

3.6 Past management: Pollarding for timber produce and wood pasture

The survey was carried out by James Curry and Steven Davis who both hold the Arboricultural Association Technicians Certificate. Steven also has a BSc in Conservation and the Environment.

Additional assistance was given via Stephen Westover of Westover Woodlands holder of the Professional Diploma in arboriculture.

The pollards were surveyed as individuals, providing information on the categories listed within the instruction section of this report. However, group dynamics were considered when specifying arboricultural operations.

4.0 Method of data collection

Each Pollard was given a number and tagged using aluminium discs and one inch roofing nails to secure them. The tags were usually attached on the North side of the pollards, where sound wood permitted good fixing, usually at the height of the bolling. Where there is an existing readable tag on the pollard this number was also recorded. In addition to this a photograph of each pollard was taken. Note that due to the supply of tags numbers 201 – 300 do not appear.

Scientific names of each of the pollards were recorded.

The Diameter at Breast Height was measured in centimetres using a rounded down centimetre girth tape, at a point on the trunk avoiding any major swellings.

An estimated amount of sound cambium around the circumference at breast height in steps of 10% was recorded as an indication of the continuity of live cambium supporting the crown of the pollard. Note that a recording of 95% indicates that at the point recorded the circumference is 100% sound, but that areas of dysfunction occur elsewhere on the trunk.

The Height of the bolling, the total tree height and the maximum crown spread were all taken as estimates in metres. The bolling height was measured in intervals of 0.5 metres.

For each pollard comments were made where appropriate leading to recommendations. These consist of specifications for arboricultural operations in the form of pruning and felling works with the key objective of sustaining the pollards by minimising failure. This will help to provide a continuous habitat.

Public health and safety was not a consideration with regard to recommendations when surveying the pollards.

Given the nature of these pollards they all need work if they are to be conserved in the long term. Only work needed within the next five years has been prioritised, based on the evidence collected at the time of the survey.

The priorities are as follows:

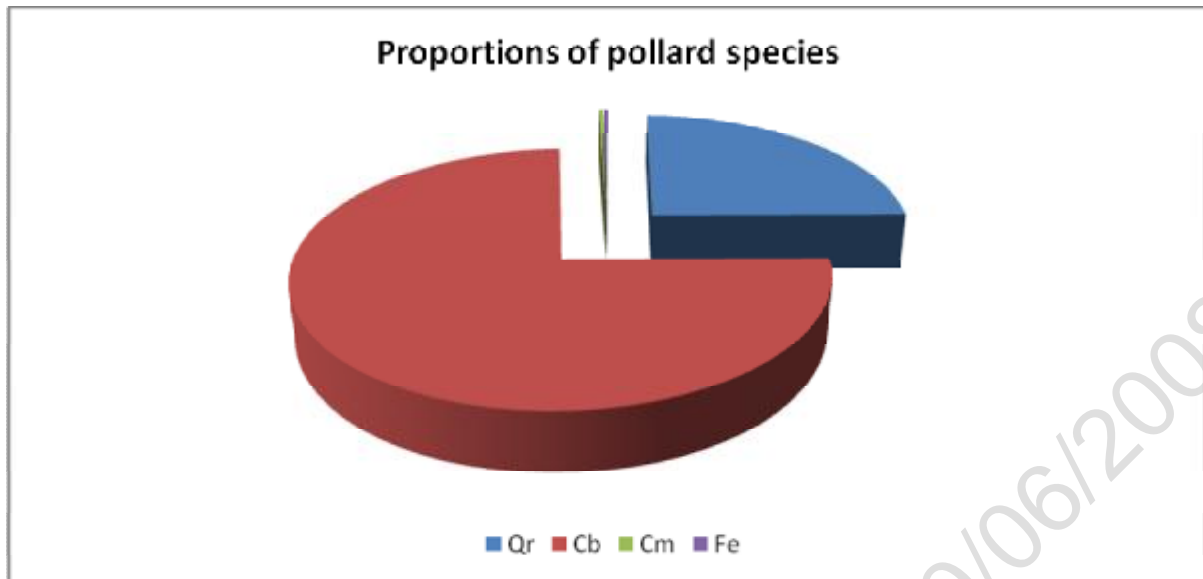
- 1- Work to be implemented in the next available season
- 2- Work to be implemented within the next 3 years
- 3- Work to be implemented within the next 5 years

Some of the pollards have been given recommendations for future management without priority, these would fall in the 5 year plus category, or could be included earlier if circumstances allow.

For ease of locating the pollards in the future a map has been produced. A scale map was provided by Epping Forest Country Care on to which some of the pollards were recorded. The points that they have been recorded are all approximate. The pollards are tagged and mapped in as logical order as possible, but given the nature of the site sometimes a logical flow was difficult or not possible.

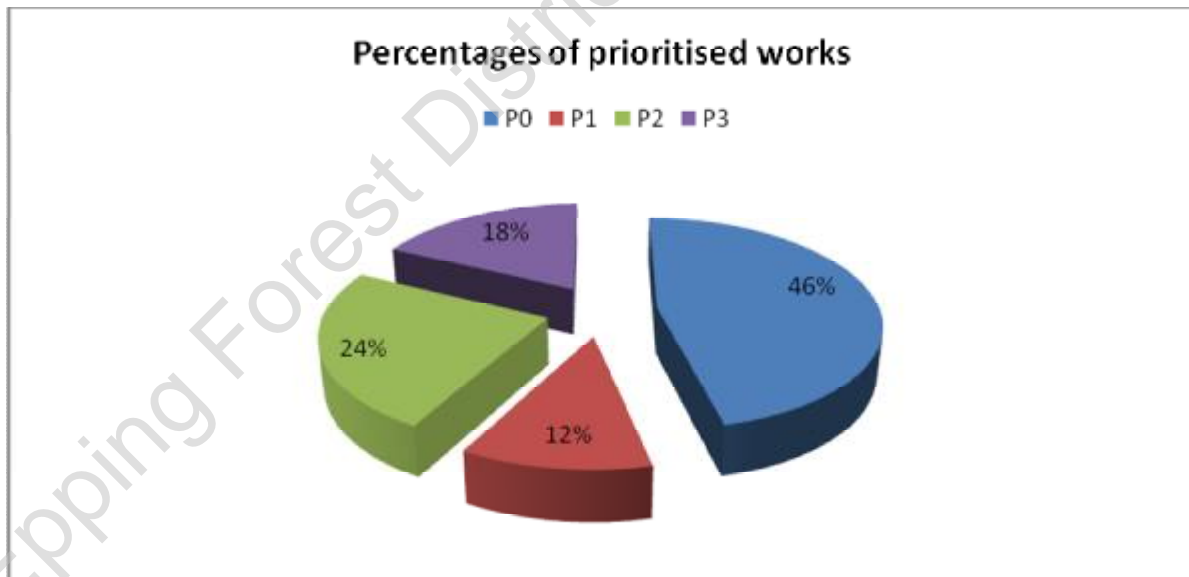
5.0 Recommendations and Conclusions

In total 366 pollards were surveyed, however due to the density of the woodland it is possible that some may remain unrecorded. Proportions of the different pollard species can be seen in the graph below.



Specific recommendations with regard to the management of the pollards are to be found within the survey information.

As previously stated the pollards were each given a priority number if they fell into a category that required management over the next 5 years. The following pie chart illustrates the percentage of prioritised pollards that require work within the next 5 years.



This table gives the exact figures of the amount of pollards that fall into each category.

Priority 0	Priority 1	Priority 2	Priority 3
170 Pollards	42 Pollards	89 Pollards	65 Pollards

However due to the nature of the woodland the management of the pollards is not the only thing to be considered.

Some suggestions that may help to enhance the wildlife value of the woodland are as follows:

- Grassland management: Create field margins on the periphery of the woodland and recreation ground to diversify the habitat and improve biodiversity.
- Wildlife corridors: Encourage links with surrounding habitats to improve the migration of species thus enhancing species diversity.
- Grazing: Implement a grazing management system for the woodland to manage the scrub layer and create more favourable conditions for ground flora.
- Litter & Fire Hazards: Put measures in place to prevent litter dropping, thus reducing fire hazards.
- Education: Further explore links with the community, promote more group involvement and enhance/ create interpretation boards. This will improve public awareness to the importance of this woodland and the wider environment.
- Survey: Carry out a full ecological survey if this has not already been undertaken so as not to detrimentally disturb existing habitats.
- Mapping: The map could further be enhanced by plotting more pollards as works progress to ease their location.
- Monitor: Monitor the pollards to take into consideration changes over time to aid management decisions, also check the tags on a regular basis and renew if needed.

6.0 Explanatory notes to accompany survey.

Column 1: Tree Number

Trees have been tagged, usually on north side, where sound wood permits good fixing. Where an existing readable tag is on the pollard, this number is also recorded in brackets.

Column 2: Species

Scientific name recorded. See Key below.

Column 3: Height to bolling

An estimate in metres at 0.5m intervals.

Column 4: Total overall height

An estimate in metres.

Column 5: Maximum crown spread

An estimate of the widest crown spread.

Column 6: DBH

Diameter at Breast Height measured in centimetres with a rounded down centimetre girth tape, at a point on the trunk avoiding any major swellings.

Column 7: % Circumference of Sound Bark

Estimated amount of sound bark around circumference of trunk at breast height in steps of 10%, as an indication of continuity of live cambium supporting canopy. Note that a recording of 95% indicates that at the point recorded, circumference is 100% sound, but that lenses of dysfunction occur elsewhere on trunk.

Column 8: Comments

Given the nature of these trees, all have decay and cavities. Only those features of particular note and indicating work required within next 5 years have been recorded.

Column 10: Recommendations

Given the nature of these trees, all need work if they are to be conserved in the long term. Only work needed within next 5 years is recorded.

Column 11: Priority

1 – Work to be implemented in next available season.

2 – Work to be implemented within 3 years.

3 – Work to be implemented within 5 years.

Key to Tree Species

Cb	Carpinus betulus	Hornbeam
Fe	Fraxinus excelsior	Common Ash
Ia	Ilex aquifolium	Holly
Qr	Quercus robur	Pedunculate Oak

Scap	Salix caprea	Goat Willow
Cm	Crateagus monogyna	Hawthorn

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