

Botanical surveys

A botanical survey of Heartwood was undertaken in 2011 to record and monitor changes in plant species diversity and composition; particularly with regard to successional changes from arable to woodland habitats both within the natural regeneration area (referred to as 'The Thicket') and within the sapling plantation plots. Botanical surveys were also undertaken within Pudler's and Langley Wood to monitor any potential changes to the ground flora of existing ancient woodland (e.g. the original environmental impact assessment identified the potential for open access to lead to detrimental impacts on woodland ground flora).

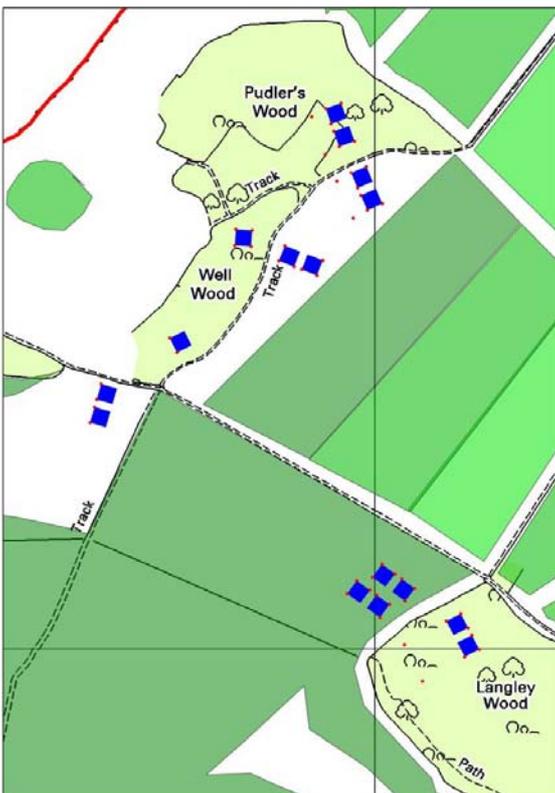
The aims of the botanical survey were therefore to:

1. compile a comprehensive botanical baseline data set for each study area; and
2. undertake systematic sampling of each study area in order to record and monitor long-term temporal variations in plant species diversity.

Four specific areas were identified for further botanical study (see Map), these were:

- Pudler's Wood;
- The Thicket (an area of natural regeneration adjacent to the south-east edge of Pudler's Wood);
- Langley Wood; and
- Sapling plantation area (adjacent to the northern edge of Langley Wood).

In order to form a baseline data set a botanical species list was compiled for each of the four study areas. The first visit was carried out in September 2011 by Laura Gravestock, Andrew Harris, Brenda Harrold, John Moss, Paula Shipway, Jean Williamson, assisted by Chris Shortall and Alison Moore. Further baseline surveys are planned for spring and summer 2012.



In conjunction with the baseline surveys, systematic sampling techniques were employed within each study area, by Laura Gravestock, John Moss, Paula Shipway and Jean Williamson commencing in spring 2012. These comprised 2m x 2 m quadrats spaced at 10 m intervals along a 50 m transect (see map). Each study area contained two transects, separated by at least 20 m; making a total of 10 quadrats per area surveyed. The ends of each transect were marked with wooden stakes to allow the same transect locations to be used in future years.

Due to the persistent wet weather throughout April and the amount of standing water in parts of the study areas, the spring surveys could not be completed until the end of May 2012. Transect surveys are to be repeated in the summer and autumn of 2012 so the data is representative throughout the seasons. It is also the intention for transect surveys to be repeated in the future on a biennial to quinquennial (or greater) frequency to record long-term trends.

Photographs: Langley wood by Andrew Steele and 'The Thicket' in Sept 2010 by Linda Smith

*Map by Brian Legg with permission from Ordnance Survey
Text by Laura Gravestock, June 2012*

