Aim
To assess whether the national Ancient Woodland Inventory for the Chilterns is accurate by carrying out a pilot survey to determine if a full scale reassessment is required. This information will feed into the review of the Chilterns AONB Management Plan, which is to be revised in 2008.

Headline findings
- This pilot study found an increase in ancient woodland from 11.7% of survey area shown on the inventory to 14.2%.
- The proportions of ancient semi-natural woodland were found to be 53% greater and the amount of plantation on ancient woodland sites 19% less than shown on the inventory available on websites.

Background
The Chilterns is one of the most heavily wooded areas in the UK with 21% cover of which 59% is ancient (NE inventory) and is famous for its beech woodland. Ancient woodland is a valuable biodiversity resource. Once lost it cannot be recreated. This follows the government’s Keepers of Time policy (2005) which aims to protect ancient woodland. Planning Policy Statement 9 (2005) states that local planning authorities should identify any areas of ancient woodland in their areas that do not have statutory protection (e.g. SSSI).

PPS9 lead to the recently published studies in Wealden District, Mid Sussex District and Tunbridge Wells Borough which found an increase in the area of ancient woodland in these Districts. (P.McKernan et al for FC, NE, LA, WT and High Weald AONB).
The Chilterns AONB is north west of London and in both South-east and East England regions; it spreads across 4 counties Oxon, Bucks, Beds & Herts.

Summary
This survey and report was carried out by John Morris of the Chiltern Woodlands Project. Field work took place during the summer and autumn of 2007. 20 x 1km squares have been surveyed.

Woods were identified as either
a) ancient semi-natural, (ASNW)
b) plantation on ancient woodland (PAWS) or
c) recent woodland.

Method in the Chilterns
1. It was agreed to use the randomly selected 1km squares identified for the Chilterns AONB Land Use survey.
2. For each of these squares the woodland inventory and habitat surveys was downloaded from www.magic.gov.uk
3. Areas could be measured and details checked using the Forestry Commission GLADE Land Information Search.
4. Before the woods were visited the First Series OS maps from 1880’s were copied from www.india.british-history.ac.uk and also looked at the series of early OS maps on www.old-maps.co.uk which has a series of maps spanning 50 years.
5. Information was recorded to be comparable to the earlier Weald and Mid Sussex studies. Record sheets were based on the Ancient Woodland plants identified in “An evaluation of wildlife interest of Chiltern Woods” - NCC 1990 - which was used as the basis for the surveys by Walsh and Buchanan and lead to the maps in the Plan for the Chilterns Woodland Policy.
6. All woods were visited on foot in each km square using public rights of way as far as possible. A very few areas were not accessible. Knowledge of some woods where the CWP had previously given advice was taken into account.
7. Digital photographs were taken where it was thought helpful to record the woodland condition and features and where light levels were suitable
8. Dominant ground vegetation and tree cover were recorded.
9. Time of year of survey meant that it was not possible to see many ancient woodland indicator species - survey between March and June would provide more detailed information on plants (but this has been done before and is not essential for the purpose of this survey).
10. Possible threats to the woodlands were recorded on the forms eg invasive species such as laurel, Himalayan balsam etc.

Summary table of results
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<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>In the Inventory</td>
<td>124.94 ha</td>
<td>6.86 ha</td>
<td>72.52 ha</td>
</tr>
<tr>
<td>Revised ASNW total</td>
<td>190.60 ha</td>
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</table>

That is, an extra 53%

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</tr>
</thead>
<tbody>
<tr>
<td>In the Inventory</td>
<td>116.96 ha</td>
<td>35.50 ha</td>
<td>13.58 ha</td>
</tr>
<tr>
<td>Revised PAWS total</td>
<td>95.04 ha</td>
<td></td>
<td></td>
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</tbody>
</table>

That is, a reduction of 19%

The area of woodland in the Chilterns is increasing, some newly planted / regenerated areas have not been added to the maps.
**Observations**

- Small woods under 2ha need to be added. These can be harder to identify with certainty from old map information. Some of these areas may be within larger more recent woods.

- There are some transcription errors in digitising from original survey data to online inventory swapping ASNW and PAWS *(photos right and below).*

- Some larger sites have been missed off eg an SSSI, an FC wood of some 10ha, and a wood in Herts of about 3.5ha.

- Some woods are a mix of ASNW, PAWS and more recent additions and this has been over simplified in the original mapping process.

- When does a PAWS site become possible for reclassification as ASNW? Was an early aim (perhaps unintentional) of the inventory to down grade the ancient semi natural woods to PAWS if any possible planting had occurred, as this had policy implications for how the woods should be treated?

**Changes**

- One PAWS wood may have been identified from plans rather than what was actually felled and planted.

- The 1987 and 1990 storms have occurred since the original field work for the inventory was carried out. Natural regeneration and replanting has occurred in some woods after storm damage.

- Recent small scale broadleaved woodland planting in ASNW does not show up on inventory - does this matter? FC consider that if native species used this is OK.

- Have the reasons for the Ancient Woodland Inventory changed over time from their original botanical value to meet the governments “Keepers of Time” policy and archaeological / cultural interest.

**Ancient Countryside of the Chilterns**

- Common woods, wooded commons and ancient hedgerows and trackways with ancient trees are all features of the Chilterns. It is not always clear where ancient wooded landscape starts and finishes! Some of these features in the Chilterns are well over a thousand years old and some may date back to pre Roman times!

- The extent of ancient high forest beech woods in Chilterns has probably been underestimated.

- Common land was a major part of the Chilterns before enclosure in the nineteenth century, much of it was once wooded, or wood pasture, but has not been included on surveys eg Low Scrubs, Penn Wood, Common Wood, Naphill Common and many others.
Data / position before the pilot survey

Figures provided by Patrick McKernan from Ancient woodland cover from the Ancient Woodland Inventory (Forestry Commission version, 2003) All woodland cover from the National Inventory of Woodland and Trees (Forestry Commission, 2002 update) NB - Data only includes woodlands >2 hectares

<table>
<thead>
<tr>
<th>AONB (entire area)</th>
<th>AONB area</th>
<th>Ancient woodland area</th>
<th>All woodland area</th>
<th>% of AONB woodland cover</th>
<th>Ancient Semi-Natural Woodland</th>
<th>% of ancient woodland</th>
<th>PAWS</th>
<th>% of ancient woodland</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilterns</td>
<td>83,828</td>
<td>9,830</td>
<td>17,588</td>
<td>21</td>
<td>5,754</td>
<td>59</td>
<td>4,076</td>
<td>41</td>
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</table>

Figures from inventory (south east region only)

**Districts in SE Region**

<table>
<thead>
<tr>
<th>District</th>
<th>County</th>
<th>Administrative area of District (Ha)</th>
<th>ancient woodland area of District</th>
<th>All wood in District</th>
<th>% woodland cover in District</th>
<th>% woodland ancient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aylesbury Vale</td>
<td>Buckinghamshire</td>
<td>90,275</td>
<td>1,890</td>
<td>4,108</td>
<td>4.5</td>
<td>46</td>
</tr>
<tr>
<td>Chiltern</td>
<td>Buckinghamshire</td>
<td>19,634</td>
<td>1,792</td>
<td>2,905</td>
<td>14.8</td>
<td>61</td>
</tr>
<tr>
<td>South Bucks</td>
<td>Buckinghamshire</td>
<td>14,128</td>
<td>1,019</td>
<td>2,833</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>South Oxfordshire</td>
<td>Oxfordshire</td>
<td>67,855</td>
<td>4,018</td>
<td>7,832</td>
<td>11.5</td>
<td>51</td>
</tr>
<tr>
<td>Wycombe</td>
<td>Buckinghamshire</td>
<td>32,458</td>
<td>3,674</td>
<td>6,091</td>
<td>26.4</td>
<td>60</td>
</tr>
</tbody>
</table>

Additional woodland areas for the Chilterns AONB from Oxford Brookes data (963 individual woods under 2ha.) supplied by Mike Render - a total of 689.1 ha of woodland not included in the inventory. Some is due to recent planting, but others may be surviving fragments of ancient woodland.

Table below gives a comparison of Chilterns AONB pilot survey with Weald and Downs Ancient woodland survey published October 2007

<table>
<thead>
<tr>
<th>Local authority area</th>
<th>Chilterns AONB</th>
<th>Wealden District</th>
<th>Mid Sussex District</th>
<th>Tunbridge Wells Borough</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>83,828</td>
<td>83,631</td>
<td>33,402</td>
<td>33,133</td>
</tr>
<tr>
<td>Original ancient wood area</td>
<td>9,830 (11.7%)</td>
<td>9,754</td>
<td>3,835</td>
<td>4,719</td>
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<tr>
<td>Revised ancient wood area</td>
<td>14.2%</td>
<td>11,710</td>
<td>5,282</td>
<td>5,391</td>
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<tr>
<td>Overall ancient wood gain</td>
<td>18%</td>
<td>1,956</td>
<td>1,447</td>
<td>672</td>
</tr>
<tr>
<td>Revised ancient wood area as % of area</td>
<td>14.2</td>
<td>14.0</td>
<td>15.8</td>
<td>16.3</td>
</tr>
</tbody>
</table>

References


NCC “An Evaluation of the Wildlife interest of Chiltern Woodlands” by R J Hornby and J Welsh - September 1990. This detailed field survey identified ancient woods over 2ha based on flora etc and is detailed for Bucks & Oxon but less so for Herts and Beds, which drew on other information..

A Plan for the Chilterns Woodland Policy 1992 with paper maps of ancient woods identifying them as SSSI, Heritage, ASNW or PAWS. (It shows FC census in 1980 that 18.5% of AONB was wooded with 15,016ha of wood over 0.25ha)

Chilterns AONB Management Plan 2002 - 7


Chilterns Historic Landscape Characterisation by David Green Bucks CC 2007.

Bucks Archaeological Society 2000 Jeffreys 1770 and Briants 1825 maps of Buckinghamshire

www.old-maps.co.uk for first series OS maps and other early maps

www.forestry.gov.uk land information search, useful for measuring areas of woodland, also shows ancient semi-natural woodland and plantations on ancient woodland sites.

Weald Ancient Woodland Survey 2006 Sally Westaway for High Weald AONB unit

Steering Group for this pilot study comprised Steve Rodrick, Chilterns Conservation Board: Loren Eldred, Woodland Trust: Mike Habergham, Forestry Commission and John Morris, Chiltern Woodlands Project, who undertook the surveys. Patrick McKernan and Mike Render of FC were kept informed.

Thanks to Neil Smith and Dr Simon Mortimer for their help in digitising the maps and the GIS analysis.

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