

# The National Forest: Research Review



THE NATIONAL  
FOREST

## Introduction

The National Forest Company (NFC) places a high priority on research and monitoring of The National Forest's creation. Having well evidenced and robust research and monitoring data is essential to underpin the strategic direction of the Forest (through the National Forest Strategy and Delivery Plan, 2009-14), and to inform best practice in creating the Forest 'on the ground'. The NFC's approach to research and monitoring focuses on how it can be used to help achieve the wide ranging objectives of the Forest's creation, set out in the National Forest Strategy.

## Why is research and monitoring important?

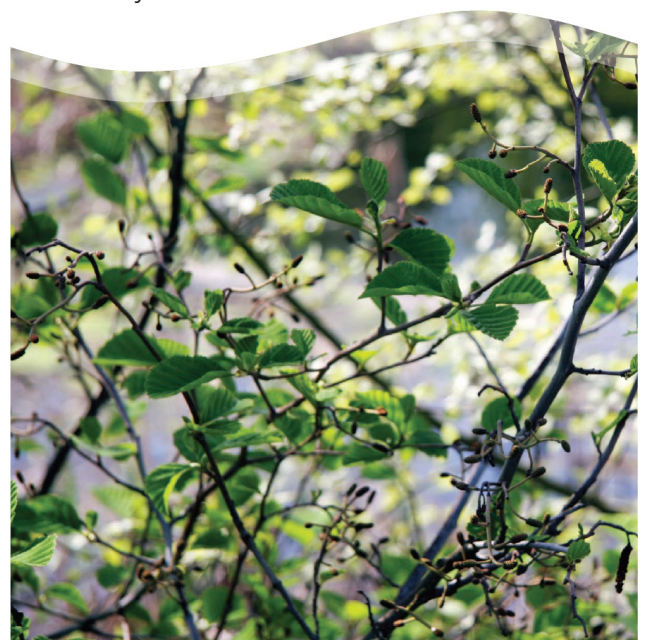
Given the national status of The National Forest, research and monitoring is important for a number of reasons:

- **Effects of the Forest's creation** – providing evidence of the effects of the Forest's creation is important to show the progress being made against our Forest Strategy and Delivery Plan, and for Government to see the results of their investment in the Forest.
- **Sustainable development** – the Forest is recognised as a national exemplar of sustainable development. Recording its progress against the environmental, economic and social objectives of the Forest is therefore very important.
- **Landscape-scale change** – the Forest is one of the largest UK examples of landscape-scale environmental change. Demonstrating the effects of the Forest's creation and the scale of change underway is a high priority.
- **Historic significance** – the Forest's creation is unique and is creating a whole new layer of landscape history. Capturing the process of change, over time, is important for current and future generations to understand how the Forest was created.
- **Learning from best practice** – the Forest is a test bed for developing new techniques and best practice. It is important to disseminate this experience to support the Forest's creation and to benefit other environmental, regeneration and landscape-scale projects nationwide.
- **Anticipating future issues** – research can help us plan for the next stages of the Forest's development and to assess potential future impacts (e.g. the effects of climate change on trees).
- **National research role** – increasingly the Forest is providing a resource and location for academic and nationally focused research. This highlights the importance of the Forest in contributing to wider, national research programmes.



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Delivery Plan 2009 - 2014



## National Forest research summaries

The NFC has produced 12 summaries of current research studies undertaken in the Forest. These include: cross-cutting studies (e.g. sustainable development exemplar study and European Landscape Convention action plan); environmental studies (e.g. tree provenance and climate change; breeding bird and ecological surveys); economic monitoring; (e.g. volume and value of tourism; quantification of the timber resource); and social research (e.g. community perceptions studies and visitor surveys).

For many of the research projects the NFC is the commissioning organisation, but there are also a number of examples of specialist, national research led by other organisations (e.g. Forest Research – social forestry; Northmoor Trust – commercial viability of Walnut; Communities and Local Government and the Forestry Commission – forestry green infrastructure research).

Each research summary includes a short description of the research, its objectives, methods of approach used, costs and timings, a summary of key findings and sources of further information.

A further 6 studies have shorter write-ups. These include on-going research in the Forest area and as these studies are completed they will be added to the set of research summaries.

### The National Forest Breeding Bird Survey

British Trust for Ornithology, National Forest Company



#### Introduction

##### The research

The National Forest Company (NFC) commissioned the British Trust for Ornithology (BTO) to undertake a Breeding Bird Survey\* (BBS) across The National Forest in 2008\*. Regular monitoring of key species attracted to the main habitats in the Forest will provide a valuable indicator of the status of bird populations and the quality of wildlife habitats. It is the NFC's intention to commission regular, smaller sample surveys each year (e.g. 10% of the original sample size), with a full re-survey every fifth year.

##### Why do it?

The status of wild bird populations is used as an important indicator of the health of the countryside and our environment by government and wildlife organisations. The BBS is a national project that monitors changes in the breeding populations of widespread bird species in the UK. The NFC recognised the importance of breeding bird surveys, as part of its broader biodiversity monitoring, in *The National Forest: an exemplar of Sustainable Development*\*. This is set within the context of recent UK trends\* that demonstrate how the index for both breeding farmland and woodland birds is now at a lower level than in the 1970s. The National Forest's creation has the potential to help reverse this trend, so long-term monitoring of bird populations is an important part of tracking biodiversity change across the area.

##### Aims & objectives

- To provide information on the status of wild bird populations in the Forest and to compare it with populations on a regional and national level.
- To provide a baseline and template for the NFC to conduct future surveys to monitor bird population changes and trends over time.
- To provide additional survey information that contributes to the national BBS dataset.



#### The Project

##### Description

The survey covered 48 randomly selected 1 km squares (or approximately 10%) of the Forest area. The squares were distributed across the Forest's six landscape zones to get a wide representation of landscape and habitat types. The survey represents one of the most intensive BBS surveys undertaken in any area in the UK.

##### Approach

The NFC used its Geographic Information System to select a sample of 1 km squares, all at least 90% within the Forest boundary. The squares were also stratified within each of the landscape zones, to ensure that the proportion in each zone matched its land area. Surveyors made two visits, one between early April and mid-May (early visit) and a second between mid-May and the end of June (late visit). At each visit surveyors walked two pre-selected transects through the 1 km square and recorded all birds that they saw or heard. The two transect lines were ideally parallel, running either north-south or east-west, 500m apart and 250m from the edge of the square. In almost all squares, however, the pattern required modification according to the nature of the terrain and the constraints of access.

## The National Forest - A national research test bed

The NFC is keen to develop further collaborative working with national research councils, universities, Government research agencies and other bodies in the future. In particular, the NFC would like to see the Forest area used more by outside bodies as a focus for specialist research into the effects of landscape-scale environmental change. Given the breadth and intensity of research already underway in the area, there is potential for the Forest to develop as a national research 'hub' and centre of learning. Through collaborative approaches between different organisations, across a range of topic areas, the sum has the potential to be far greater than the parts. This would add significantly to the overall knowledge and understanding about The National Forest as a changing place.

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