

Alice Holt RESEARCH FOREST

Alice Holt has been intensely studied by scientists since the 1950s. As a result, Forest Research (FR), the Forestry Commission's research agency, has amassed a wide breadth of knowledge on its characteristics across many aspects of forestry and environmental science – from flora and fauna to climate, soils and topography.

As not only an ancient woodland but also a working forest and woodland park, Alice Holt Forest offers a rare opportunity to conduct studies in a known context, with a wealth of existing information already available.



Over 50 years of scientific study

Why use a Research Forest?

Research Forests provide a very special research environment and offer access to a legacy of data, putting current research results into a known environmental framework and increasing their potential. Using existing data, such as that from long-term monitoring plots, can help strengthen research proposals, e.g. to funding bodies, and broaden research projects beyond their original scope.

In such a research environment, close collaboration between forest managers and scientists enables findings to be more easily tested and fast-tracked into operational practice. Studies can also be showcased to a wide audience – the general public – highlighting the importance of forestry science through outdoor workshops and explanatory material.

Internationally, Research Forests have been pivotal in increasing understanding of how the forest and environment interact, as well as demonstrating the possible effects of climate change. Their findings have helped shape international policies on pollution and sustainable forest management.





Research possibilities at Alice Holt Forest

At Forest Research, we're keen to encourage a wide range of forestry and environmental research and would welcome opportunities for other organisations to work alongside us in Alice Holt Forest.

As well as providing opportunity for research in areas such as ecology, sustainability, biodiversity and climate change, Alice Holt Forest can also support emerging interests, such as social forestry – for example research into the relationship between environment and social wellbeing, and opportunities to link ecosystem science with public policy. This issue is particularly important as we see the effects of anthropogenically driven climate change on our daily lives.

Benefits

- **A known environmental context in which to carry out new research**
- **Access to 50 years' data from well-organised databases, including: physiographic, soil and vegetation information; stand and silvicultural histories**
- **A wide variety of native and non-native tree species available for study**
- **An established woodland park, offering social research opportunities**
- **A secure site with long-term tenure**
- **Meteorological records since 1949, collected in line with Met Office standards**

Current research

Ongoing FR research includes:

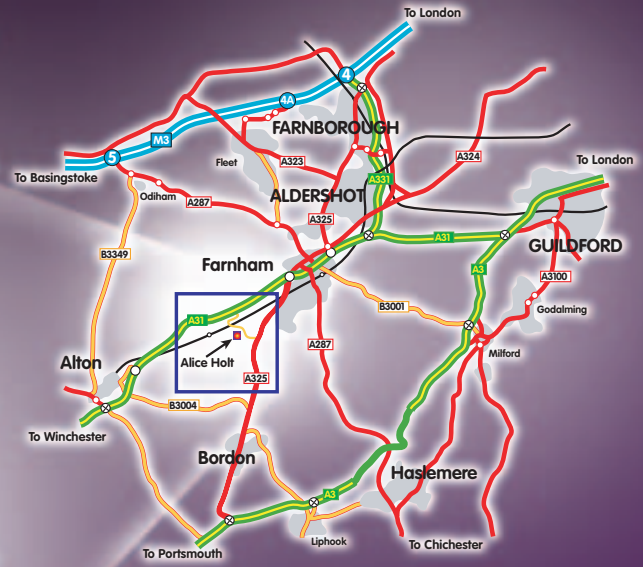
- **Forest carbon dynamics** – The combination of conventional tree measurement plots, remote sensing data, state-of-the-art facilities such as the 'Straits flux station' and model development are improving understanding of the carbon balance of forests and helping to predict how carbon exchange will alter in the future.
- **Environmental change** – Observations from the national and international monitoring networks represented in Alice Holt Forest are improving our understanding of how woodland ecosystems respond to environmental drivers such as air pollution and climate change. Open-air growth chambers also enable manipulation of the gaseous environment.
- **Woodfuel research** – Biomass energy is an area of current research focus. Alice Holt Forest has a range of experiments and demonstration plots where potential woodfuel is being investigated using conventional woodlands and short-rotation coppice plantations of fast-growing tree species such as poplar and willow. The national collection of poplar species and cultivars is also located in the Forest.



International links

Alice Holt Research Forest is a member of a number of European and global research networks including: the United Nations Economic Commission for Europe (UNECE) ICP Forests programme on Forest Condition and Intensive Monitoring Networks, as well as CarboEurope, Fluxnet, the International Long Term Ecological Research (ILTER) Network, and the Global Terrestrial Observing System.

These links provide a strong science network and facilitate knowledge sharing with the wider research community.



Further information

If you would like more details on Alice Holt Research Forest or to discuss the possibility of carrying out research at Alice Holt, please contact:

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