Birkbeck UNIVERSITY OF LONDON

**Institute of Environment**

The LINNEAN SOCIETY of London

# Free Public Lecture Series, Autumn 2011

# 'WOODLANDS AND US – a review of use and misuse'

## Birkbeck Institute of Environment, University of London

in conjunction with the

## Ecology and Conservation Studies Society and Linnean Society of London

This series looks in detail at British Woodland, from its origin, to the depleted expanse remaining today. In addition to their environmental value, parts of many woodlands have through the centuries been coppiced, a benign practice favourable to wildlife. However, more recently, with commercial forestry, vast conifer plantations have sprung up, scarring the countryside. As deciduous woodland becomes scarce, it is under greater pressure. Included in this series are two ancient and well-loved forests, which are of immense value to wildlife, so that management is crucial to protect the environment and cope with visitor density.

## Join the debate. All welcome. Free admission. Booking is not necessary.

**The lectures will be held in Lecture Theatre B35 at Birkbeck College, University of London, Torrington Square, London, WC1E 7HX. There is space for 100, first-come first-served.**

**All lectures are from 6.30pm to 8.30 pm on the following Fridays. Doors open at 6.00pm.**

**For enquiries, e-mail Dave Dawson: ecssoc@gmail.com (tel: 020 8946 4476)**

14 October 'Roots and branches, the ancestry of British woodlands'
Dr Martin Ingrouille, Senior Lecturer in Biology, Birkbeck, University of London

21 October 'The Special Relationship: Man and Nature in the Rise and Fall and re-birth of a wood-pasture landscape'
Dr Jeremy Dagley, Conservation Manager, Epping Forest

28 October 'Paris and Pignut'
Dr Keith Kirby, Woodland Ecologist, Natural England

4 November 'Pest and pathogen problems threatening trees in Britain'
Dr Joan Webber, Principal Pathologist, Forest Research, Alice Holt Lodge

11 November 'Woodland management dilemmas: complex habitat, fussy birds and impossibility of pleasing everyone'
Dr Shelley Hinsley, Centre for Ecology and Hydrology, N.E.R.C.

18 November 'Management and Conservation of the New Forest'
Donald Thompson, Recently retired as Deputy Surveyor of the Crown Lands of the New Forest. Currently, Director of the New Forest Trust

**The Ecology and Conservation Studies Society and Linnean Society of London the welcome new members. Society details and application forms will be available at the door, and are on websites at:**

**http://www.bbk.ac.uk/environment/prospective/ecss** **http://www.linnean.org/**

# ‘WOODLANDS AND US – a review of use and misuse’

## Notes on the Contributors and their Lectures

**14 October ‘Roots and branches, the ancestry of British woodlands’**

**Dr Martin Ingrouille** is a senior lecturer at Birkbeck where he teaches courses in genetics and evolutionary biology as well as research methods and statistics and plant sciences. He is a plant taxonomist with an interest in speciation. He has collaborated on a wide range of research projects with colleagues at Kew, mainly using molecular techniques to provide markers to study genetic diversity in complex plant groups.

**His lecture will cover the following themes:**
The woodland of the British Isles has few native species despite having a rich fossil history. The shaping of our present-day woodland can be said to have started in the Tertiary with the gradual extinction or retreat of ancient elements and the emergence of recognisable modern species. In the Pleistocene, a modern but depauperate vegetation emerged as a consequence of repeated glacial and interglacial periods. Interesting comparisons can be made with the floristically rich woodlands of North America and East Asia. The nature of our woodlands in recent interglacial periods challenges some of our ideas about the “native” or “alien” status of some of our tree species. In this the latest warm period, the Holocene, our woodlands have been dominated successively by a range of tree species through ecological succession and chance. We can look forward to a rich “multi-cultural” woodland future.

**21 October ‘The Special Relationship: Man and Nature in the Rise and Fall and re-birth of a wood-pasture landscape’**

**Dr Jeremy Dagley** has been Conservation Manager for the City of London at Epping Forest for 16 years. His work there has involved the conservation of one of the largest populations of ancient trees in the UK and the re-establishment of extensive grazing to the surrounding lowland wood-pasture habitat. His interest in wood-pasture and woodlands was stimulated by his time as Conservation Officer for the Nature Conservancy Council, and later English Nature, conserving the Royal Forests and ancient woodlands of Essex.

**His lecture will cover the following themes:**

The special structure of wood-pasture, populated by open-grown, and often ancient, trees alongside their intricate and variable mixtures of wooded, scrub, grassland, marsh and heath make them amongst the richest terrestrial wildlife areas in Europe. Such a structure has developed through centuries of exploitation and often complex management of the land by many users. In the 20th Century, this complex management largely collapsed and left us with major challenges. What were the reasons for the systems’ demise? How to restore the lapsed system and which elements to concentrate on? How to replicate multiple uses through a modern management plan delivered by a single organisation? How to maintain open habitats in a wooded setting? How to communicate the differences between wood-pasture and ancient woodland? The talk will look at the history of the Forest in the 19th and 20th Centuries and the reasons for the losses of pollarding and grazing management. It will examine the difficulties in re-establishing these two key elements of the landscape and some exciting new developments, whilst accommodating continuous changes to the flora and fauna.

**28 October ‘Paris and Pignut’**

**Dr Keith Kirby** has been a woodland ecologist with the government conservation service for over thirty years, first with the Nature Conservancy Council, then with its successor bodies English Nature and Natural England. This has involved him in all aspects of woodland conservation from national policy discussions to direct site management. In between the bureaucracy he has maintained a research interest in the woodland ground flora, and in particular the changes that have been taking place in permanent plots in Wytham Woods since 1974.

**His lecture will cover the following themes:**

People value the displays of woodland flowers, particularly in the spring, just for their beauty, but what do the patterns of species also tell us about what is going on, or has gone on in the woods. Some plants are responding to current conditions of light or nutrients; some may be indicating longer term historical patterns

in the landscape. There have been recent indications that the richness of some woods is declining, but is this part of a long-term trend or just a phase in the woodland cycle? Which of our plants are likely to do well under climate change, which may not? The talk will explore the changes taking place in our woodland flora; how these may be interpreted; and what some of the implications are for woodland conservation.

**4 November 'Pest and pathogen problems threatening trees in Britain'**

**Dr Joan Webber** is Principal Pathologist and Tree Health programme leader in the Forestry and Climate Change Centre which is part of Forest Research. She has been employed by the Forestry Commission since 1989 and based at the Alice Holt Research Station of Forest Research. Joan became Principal Pathologist there in 2000. She has an international track record of research and collaboration on forest pathogens and woodland trees, their population biology and epidemiology, and the use and deployment of biological control in the management of tree diseases. Currently, her research is focussed on the threat posed by alien invasive pathogens, and the long-term impact on trees and forest ecosystems following their accidental introductions.

**Her lecture will cover the following themes:**

The ever-growing global trade in plants and timber provides many pathways for pests and pathogens to escape their native habitats and enter new areas. Over the past decade, several new pests and diseases have been found in the UK, some undoubtedly accidental introductions through the plant trade. These new threats include *Phytophthora ramorum* (the cause of Sudden Oak Death in North America), oak processionary moth, and horse chestnut bleeding canker, all of which have the potential to be highly damaging to the trees we see around us. The current and long-term impacts that these invasive organisms could have on our trees and forest ecosystems will be explored.

**11 November 'Woodland management dilemmas: complex habitat, fussy birds and impossibility of pleasing everyone'**

**Dr Shelley Hinsley** is an Ecologist and Ornithologist working for the Centre for Ecology and Hydrology. She did a BSc in Applied Biology at the University of Bath and became hooked on birds during a sandwich placement in the Camargue. After graduation, she worked as a Research Assistant on urban-breeding tits in Cardiff and then did a PhD on sandgrouse ecology and energetics, also based at Cardiff University, but with fieldwork in Spain and Israel. In 1990, she moved to Cambridgeshire to work on woodland birds for CEH based at Monks Wood, transferring to Wallingford when Monks Wood closed in 2009. Her woodland work concerns the effects of habitat quality (e.g. wood size, structure, composition) and landscape structure on bird distribution, abundance and population dynamics with particular reference to the consequences of habitat fragmentation. It also includes consideration of individual bird quality and plumage characteristics. In recent years, the work has been extended to include farmland birds in relation to habitat provision under agri-environment schemes, and to the application of airborne remote sensing to quantify woodland and landscape structure and composition. Beyond work, she enjoys bird watching, running, music and growing vegetables.

**Her lecture will cover the following themes:**

If you type "woodland management" into a well known search engine, you get 2,120,000 hits in 0.08 seconds, so there is no shortage of advice. Therefore, although this lecture will deal with certain practical aspects of managing woodland for birds, it will concentrate on some of the characteristics of both woodland and birds that create management dilemmas. We will explore the complexity and physical extent of woodland structure and composition, and how this translates into the wide range of resources (temporal, spatial, structural and compositional) exploited by birds and other taxa. In using these resources birds alter the woodland and affect each other. However, the woodland is a far from passive partner in these interactions – it has a great influence on the birds – and such habitat-bird interactions are in turn affected by wider factors, especially time and climate. Airborne remote sensing can assist in quantifying woodland structure and composition at high resolution on a landscape-scale. Britain's long history of landscape modification has reduced woodland cover to small, scattered patches in which primaeval conditions have been replaced by highly modified secondary structures and community dynamics. In some cases, such as coppice woodland, it has also created habitats now associated with high diversity and valued bird communities. Small size, external pressures and past modifications, coupled with current human requirements and use of woodland (e.g. carbon sequestration, timber, wood fuel, recreation, education, sport, shooting) all require further management and hence the bottom line of the dilemma – deciding what you want and how feasible it is.

**18 November 'Management and Conservation of the New Forest'**

**Donald Thompson** was brought up on a farm, switched to forestry and after college joined the Forestry Commission with the intention of leaving after 5 years. In the event he had a career with them for 40 years covering forest management, silvicultural research, tropical forestry, timber utilisation, timber marketing and contract management, negotiations on timber regulations in the EEC, the UK Forestry Standard for sustainable forestry and finally as the Deputy Surveyor of the Crown Lands of the New Forest. He retired in 2003, since when he has become a Director of the New Forest Trust and worked on tropical rainforest problems with the Macushi Amerindians in Guyana, among other things. He has lived in the New Forest for the last 12 years.

**His lecture will cover the following themes:**

'Live your life as if you will die tomorrow and look after our land as if you will do so for ever'. The differences between management and conservation blur if you start here. Time is the big similarity. Where do we sit now in the time line from the past into the future for everything living in the forest. Beginning with human ecology we can see how, in the millennia since the last Ice Age, the woodlands and heaths have been changed right up to the present day. First, the changes were driven by survival of individuals, then the state. Came then the land improvers, then the introducers, then the fixers, then the players; layer upon layer. So that managers today are challenged by having to decide conservation of what for whom. An affluent society is a threat to many forms of life partly because no corner is left untouched unlike in previous times with smaller populations. Plants, insects, fungi, reptiles, birds, ungulates will all be mentioned, as the burden on managers has exponentially increased. Habitat conservation is not enough in a largely manmade environment like the New Forest, nor should we only worry about rarities because applying the precautionary principle and only win-win solutions is not how nature works. What we do is part of the natural evolution of the place and who would be arrogant enough to predict where that process will lead.

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**The Ecology and Conservation Studies Society** aims to foster interest in conservation based on sound ecological principles by arranging lecture courses, field visits and meetings, and by keeping its members up to date on literature, new concepts, research and practical field studies techniques. Membership is open to all who have relevant experience or interests. Non-members are most welcome at these lectures series.

**Web site : http://www.bbk.ac.uk/environment/prospective/ecss**

**The Linnean Society of London** is the world's oldest active biological society. Founded in 1788, the Society takes its name from the Swedish naturalist Carl Linnaeus (1707–1778), whose collections have been in its keeping since 1829. The Society promotes the study of all aspects of the biological sciences, with particular emphasis on evolution, taxonomy, biodiversity and sustainability. It encourages and communicates scientific advances through its three world-class journals, special publications, meetings and website. The Society also reaches out to future biologists through schools and educational programmes.

**Web site : http://www.linnean.org**

**The ECSS Spring 2012 Free Public Lecture Series** will be run in collaboration with **Birkbeck Institute of Environment**. It will be held on six consecutive Friday evenings from mid February to mid March 2012. This series will examine, in depth: - **Urban Ecology**.

**Watch our website; - details will be posted by January 2012.**

**http://www.bbk.ac.uk/environment/prospective/ecss**