In a crowded island, how do we make space for a diverse wildlife? Until recently, the management of wildlife habitat was by mimicking traditional economic management, in an attempt to preserve rich remnants of the past and deter alien invaders. Dissenting voices, however, argue that we can create large blocks of wilderness, where natural processes allow native species to manage themselves with minimal intervention by us. Another view is that tradition is too focussed on birds, bees and wild flowers, ignoring most other biodiversity. Yet others find value in mixtures of both native and established exotic species and argue that it's difficult and unnecessary to strive purely for natives. This series asks whether our traditional management prescriptions need an update?

Friday evenings at 18:30. Lecture theatre B33, Birkbeck College, Torrington Square, London.


21 Feb. Unseen biodiversity - managing for the invisible invertebrates. Roger Key, Consultant, previously Senior Education Officer at Natural England


7 Mar. Pond restoration to conserve biodiversity in agricultural landscapes. Dr Carl Sayer, Geography Department, UCL.


Management of wildlife habitat

Notes on the Contributors and their Lectures

14 Feb. Managing large forests for multiple benefits. Jonathan Spencer graduated from Nottingham University in Botany and Zoology. He then was a research assistant in Genetics Department at the University of Cambridge. After a year birdwatching and travelling in tropical forests in Malaysia, he was fortunate enough to be given a Manpower Services Commission post with the Nature Conservancy Council, identifying and mapping ancient woodlands. This set the course for his subsequent career in nature conservation and forest ecology. After years as a woodland ecologist with George Peterken, and several years as an NCC/English Nature officer in Buckinghamshire he was seconded to the Forestry Commission in the New Forest, later being permanently appointed to FC England as Senior Ecologist for England. In June 2012 he was appointed as Head of Planning and Environment for FC England.

Jonathan leads a team of Forest planners and ecologists delivering wildlife conservation across 268,000 ha of land in England (an area roughly the size of Oxfordshire). He will describe the practicalities of managing the Forest Design Plan programme, which aims to integrate economic, ecological and social needs across the Public Forest Estate. Alongside this, the estate is managed sustainably, so that it achieves the Forest Stewardship Council (FSC) stamp of approval. He also works with the management of wild deer (and wild boar). Forests contribute significantly to the objectives of the England Biodiversity Action Plan and other Governmental programmes. This requires the innovative integration of forest planning and management with the policies and programmes of Defra, Natural England and the Environment Agency.

21 Feb. Unseen biodiversity - managing for the invisible invertebrates. Roger Key is an independent environmental/educational consultant in North Yorkshire. He formerly worked as a conservation scientist for over 25 year at the NCC, English Nature & Natural England, taking the lead on invertebrates and their habitats, and environmental education. He’s probably best known for his former BBC work with bugs, (presenting on Countryfile, the Countryside Hour, the Really Wild Show &c.) and also for his invertebrate photographs, published by over 300 organizations in 19 countries. Recently he’s been involved on research expeditions to South Georgia and St Helena, looking for alien invasive invertebrates (and unfortunately finding far too many), doing huge numbers of children's bug-related events, as well as lecturing and providing invertebrate conservation training for a wide range of universities and other organisations.

Invertebrates are (or should be!) everywhere and are crucial in the functioning of all ecosystems and yet are often totally overlooked when managing habitats for conservation. Many species are in serious decline, and the overall abundance of invertebrates is becoming alarmingly reduced, with serious implications for ecosystem functioning. With a good site sometimes supporting several thousand species, many with completely unknown habitat requirements, taking a species by species approach to their conservation is unrealistic. However, there are general principles that can be followed that will favour both species richness and abundance of invertebrates, especially concentrating on features of the habitat that are often overlooked by habitat managers.

28 Feb. National Trust: Managing Unnatural Histories. Dr. David Bullock is Head of Nature Conservation in the National Trust in England, Wales and Northern Ireland where, he advises on sustainable management of wildlife and natural resources over 255,000 ha of land, 700 km of coastline, in 400 gardens and 250,000 built structures. In a previous incarnation as an academic, he researched the ecology and management of problem animals such as feral goats, and the impacts of other non-native invasive species on native biota. His work today often involves advice on control or eradication of invasives, some of which has been controversial. He is passionate about increasing people’s connections with nature, without which some habitats and species will decline. He recognises that the conventional routes for public understanding of how nature works (such as through evidence-based scientific enquiry) does not work for many people, for whom other portals such as the arts and myths may be more helpful. Of late he has been particularly active in advising on management of wildlife in unnatural habitats such as buildings.

The 1907 Act requires the National Trust to manage for plant and animal life, and the landscapes in which the buildings sit. David offers three mini-talks on “when nature moves in”. Those attending the lecture will be asked to vote to choose which of the following topics they want to hear:
Eradicating non native mammals from seabird islands:
Rats were removed from Lundy Island to stop them killing seabirds, especially the Manx shearwater, for which the UK has a global responsibility. This was far the most controversial of recent eradications. We will explore the ethics, and ecological consequences of the removal of rats from the island, and what we mean by "success".

Asian ants and Italian snails.
An exotic ant was noticed recently in Hidcote Manor Garden in Gloucestershire. This Invasive Garden Ant is found throughout the garden, and in buildings, where it orientates toward electrical currents and aggregates in its thousands in box junctions. This enthusiastic predator and aphid farmer might displace native ants. Can we manage, and perhaps eradicate it, in its only known UK location? A second risk from the importation of Italian tufa to restore a grotto was thwarted. But the Cliveden snail - also from Italy on imported stone - is established and seemingly benign. It lives in one of the most important bat roosting sites in the country, Cliveden House, famous for other things.

The northern blue fin tuna in Tatton Hall, Cheshire.
Natural history collections in our big country houses have been seen as not "PC"; ghosts of a colonial past of slaughtering wildlife and displaying stuffed heads. Today these collections seem to have no relevance. However, with molecular based analyses we can learn much, so they have an important afterlife helping to conserve the places they were collected. In the UK's National Ecosystem Assessment, one of the main drivers of biodiversity loss is overexploitation of marine fisheries. The two "thunny" specimens in Tatton Hall are a metaphor for healthy seas rich in fish. And other big game trophies could convey conservation messages.

Really wild nature that was - is it back again?
Big cats: Facts, factoids and myths, and what people think. Large woodland carnivores (brown bear, lynx and wolf) became extinct here hundreds of years ago through persecution and habitat destruction. English woodland cover now approaches the Domesday book extent. There are strong arguments for reintroduction of at least one species, the lynx, but there are already many reports of big cats at large in Britain. We use reports on National Trust land to illustrate and deploy innovative science, and capture people's feelings. People - as opposed to state agencies - are remarkably tolerant of the presence of large carnivores. They are a metaphor for the wild, and the need for lots of space for the care of natural resources and viable wildlife populations.

Bats need old buildings; old buildings need repair.
Some of our bats rely on buildings. All bats and their roosts are totally protected from disturbance or damage. Intriguingly, one species, the endangered lesser horseshoe bat, breeds only in voids in large houses. With a quarter of our buildings in repair at any one time, National Trust building staff could think that the bat goes to extraordinary lengths to make repair and restoration difficult and costly. At the same time we celebrate the presence of these bats in our buildings. How do we resolve this conflict, which is likely to multiply with climate change?

Hunky punks, gargoyles, grotesques and other gothic wildlife.
Master stone masons were excellent observers of plant and animal life - many species are easy to identify from their carvings. They are a wonderful opportunity to celebrate the diversity of life. We do a quick biological survey of the walls of monumental architecture, and ask how to celebrate it, maintain it and whether it has a future in the conservation of nature? Salamanca's cathedral is adorned with modern carvings, including one of a large mammal that’s endemic to Europe and may well become extinct soon. Can we use monumental art and a new paradigm for species translocation to save the Iberian lynx from extinction?

Keeping meadows flower-rich. The myth of late cuts.
Management of our few remaining flower-rich meadows typically involves a late cut. The flowers shed seed before the hay is gathered. A late cut is required under agri-environment schemes, but what happened when the farmer sought the highest productivity, and their nature value was commonplace? Analyses of dates and recollections of a retired Yorkshire Dales farmer suggest that the regime was much more flexible, is this a lesson for adaptability in the face of climate change?

7 Mar. Pond restoration to conserve biodiversity in agricultural landscapes. Dr Carl Sayer is a Senior Lecturer in freshwater ecology within the Environmental Change Research Centre (ECRC), University College London (UCL). His expertise lies in the field of aquatic conservation and he is especially interested in ponds, lakes and rivers in lowland landscapes. Carl is a co-founder of the River Glaven Conservation Group in Norfolk and is a regular advisor to the The Wildlife Trusts,
Broads Authority, National Trust, Natural England and The Rivers Trust on aquatic conservation and restoration issues. Carl is passionate about communicating research findings to local wildlife groups, land-owners and the general public, to help enact positive change in the aquatic environment.

Nature has undergone an unprecedented decline in our UK agricultural landscapes since World War II. Along with the loss of hedges, and wild-flower meadows, ponds have also been severely affected. Since the 1950s-60s many ponds have been lost to agricultural land reclamation, while at least 90% of the ponds that survive today are heavily overgrown by trees and bushes. Recent research in East Anglia, shows the huge value of pond management (removal of trees, bushes and mud) for biodiversity conservation in agricultural landscapes. Aquatic plants, invertebrates, amphibians, fishes, birds and mammals all seem to benefit hugely from this approach. Equally, initial results show that, even in-filled and ploughed over “Ghost Ponds”, can be brought back to life. It is suggested that pond management and restoration is essential to conservation in agricultural landscapes and that agri-environment schemes should take on more of this.

14 Mar. Conservation grazing, a universal panacea? Clive studied rural environment at Wye College where he organised lectures for the Environment and Wildlife Society (EWLS). He then worked with Colin Tubbs at the Nature Conservancy Council, before joining the Hampshire and Isle of Wight Trust in 1989, where he’s now one of the senior management team. He has worked on conservation in the New Forest. For most of his time with the Trust, he has developed and delivered its science base and policy framework. This has led to him representing the Trust in numerous settings, including public inquiries and select committees.

Conservation land managers are still discussing the implications of the debate prompted over a decade ago by Frans Vera. To what degree may grazing by large herbivores be considered an ecological ‘norm’ in the landscapes of our part of Europe? As practitioners we find conservation grazing comes in many forms and not all of these are under the control of conservationists. In the debate about grazing we see phrases such as ‘overgrazing’ or ‘undergrazing’, but are these concepts helpful to the practical manager? With such a wide-ranging discussion how do we know when we are getting it right?

21 Mar. River and wetland management – unleashing nature. Dave is a Biodiversity Technical Specialist for the Environment Agency. He has been involved in river restoration in London since the early 1990’s, when he was responsible for the development of the London Rivers’ Action Plan and provided technical advice on numerous restoration projects. Dave worked on secondment to the Defra, providing scientific advice to policy divisions on a range of biodiversity issues, with particular emphasis on climate change, where he represented Defra on the MONARCH project steering group. He chaired the London Biodiversity partnership. More recently Dave became a trustee for the Wandle Valley Regional Park Trust.

He will discuss how and why rivers have been managed, and how this has changed in the last 20 yrs. He will describe how ecology has become central to evaluating the success of river management and how river managers can ameliorate pressures on rivers from our other activities. An understanding of the influence of physical and biological processes shows these to be as important as restoring the physical form of rivers. We can apply some of these lessons to other wetland habitats.

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 lecture series. Web site:  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:  www.linnean.org