The Ecology Consultancy

Briefing

Issue 8

Photo: Victoria Forder

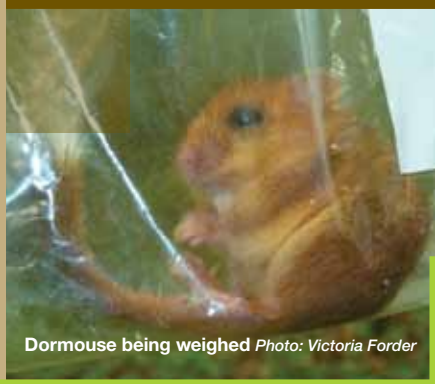
Dormouse surprises

at the end of the season

Ecologist Victoria Forder monitors the dormouse population at the National Trust property Ightham Mote in Kent, on behalf of the National Dormouse Monitoring Programme. Over the last weekend of October, 24 dormice were documented, a record for this woodland. Normally between six and 12 dormice are recorded per month, but the numbers have shot up this October.

Continued over...

Inside...



Dormouse being weighed *Photo: Victoria Forder*

Dormouse surprises continued...

During the same nest box check, Victoria found one box with four torpid juvenile dormice, one of which was snoring! (Victoria's video is definitely worth a watch: go to http://bit.ly/s6Tk1s). Dormice go into torpor during cold periods to allow them to conserve energy, and this is characterised by reduced body temperature and metabolic rate. Depending on weather conditions, dormice will start to enter hibernation from late October, when the nights become cooler and there is little food left in the trees.

In November, during the final check of nest boxes for the year, eight active dormice were found. In previous years, either none or one dormouse would be recorded in November. Due to the warm autumn this year, dormice have remained active for longer and have gone into hibernation later than is usual.

Dormice descend to the ground in winter and hibernate alone in a small tightly woven nest. They hibernate among the dead leaves at the base of coppice stools

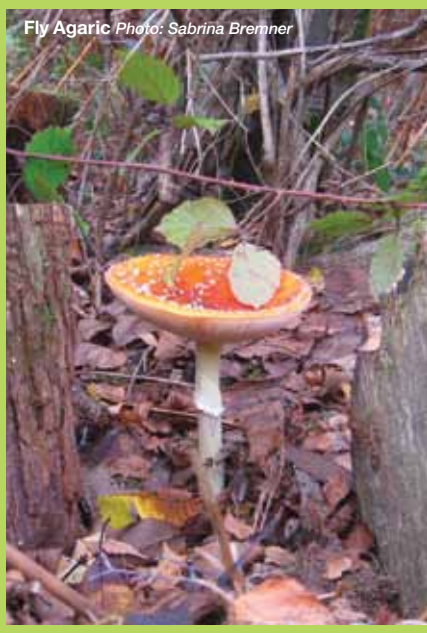
Dan is excited to find a dormouse nest!
Photo: Victoria Forder

and thick hedges, under logs and, under moss and leaves. They choose a moist place, where the temperature will remain cool and stable and the humidity high. This ensures that the animals do not desiccate during the winter.

Victoria was also part of our expert team who undertook dormouse surveys along the London 2012 Olympic Road Race route, along with our tree expert, Dan Simmons. The planned route passes through Headley Heath, Nower Wood and Box Hill in Surrey. One of the nests at Headley Heath was made completely of bracken which is quite unusual.

New planning policy favours development

The draft National Planning Policy Framework was greeted with some scepticism by the Wildlife Trusts, the National Trust, CPRE and a clamour of other groups, who are concerned about the potential threat to local nature sites. Many unprotected patches of land contain threatened habitats that provide essential ecosystem services.



Fly Agaric *Photo: Sabrina Bremner*

John Newton, MD of The Ecology Consultancy said, "we must continue to ensure that wildlife is protected throughout the planning system, particularly in urban and semi-urban areas. The Coalition Government's ecosystem assessment recognises that our green spaces provide at least £30bn a year in environmental benefits, and it is essential these features are given adequate protection. Wildlife and habitat protection has, overall, worked well in the UK over the years and has added value to development projects".

Concurrently DEFRA is about to assess whether European wildlife rules are holding back development schemes unnecessarily.

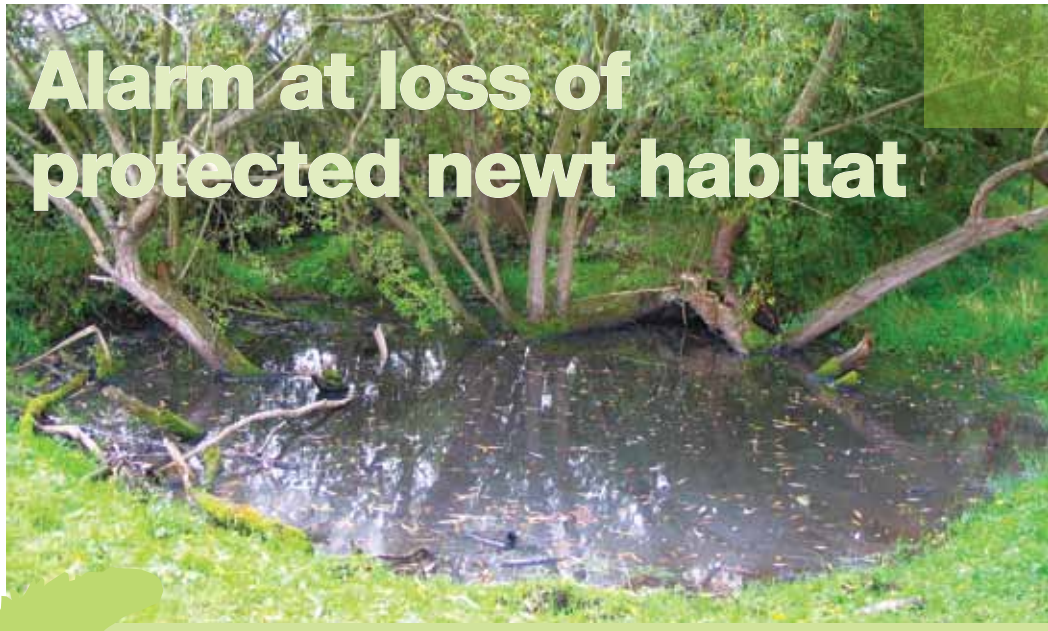
Photo: Sabrina Bremner

New England Biodiversity Strategy - 2020

DEFRA recently published the Government's new vision for biodiversity in England titled 'Biodiversity 2020: A strategy for England's wildlife and ecosystem services'. This seeks to implement international agreements reached at Nagoya (2010) and the EU Biodiversity Strategy (2011). The title provides further indication of DEFRA's new emphasis on the economic benefits of nature, and the strategy aims at taking a landscape scale approach, and involving both business and communities in conservation and enhancement measures. Its aims are stated as promoting:

- **a more integrated large-scale approach to conservation on land and at sea;**
- **putting people at the heart of biodiversity policy;**
- **reducing environmental pressures;**
- **improving our knowledge.**

The strategy targets government bodies, local authorities and community groups, and seeks to include biodiversity in government decision making, agricultural policy, marine protection and local volunteer action among other aims. The immediate implications for consultancies may be limited while the strategy is implemented, but the document is likely to be of longer term relevance for the private sector. The increase in marine protection; the creation of 12 Natural Improvement Areas; the trialling of a biodiversity off-setting scheme by Natural England; the implementation of new Green Area Designation to protect sites valued by local communities; and the requirement for all government departments to include the economic value of ecosystem services in their impact assessments, could all have far reaching effects in the mid to long term. Together with the new National Planning Policy Framework these could result in significant changes to the biodiversity constraints and enhancements for development projects, for example taking account of new local site designations or as an expectation to play a part in improving connectivity between wildlife sites.



Alarm at loss of protected newt habitat

Natural England released the results from their comprehensive investigation into the population status and distribution of great crested newts in Britain late last year. The one year study is available to download from: http://bit.ly/t2y9u7 and was carried out by Amphibian and Reptile Conservation.

The report shows that great crested newts have declined dramatically in the last 40 years and although still widespread across lowland England they are now uncommon, despite protection under UK and European wildlife law. Deterioration of habitat remains their biggest threat.

Historical research has shown that a century ago there were around one million ponds in our countryside. This number is now closer to 478,000 ponds – a decline that has been compounded by poor water quality and too much shade. The progressive loss of suitable habitat is a cause for real concern. Initiatives such as the Million Ponds Project, led by Pond Conservation and supported by Natural England, aim to put high quality ponds back in the countryside.

Conservation of the species has previously been difficult due to patchy and inconsistent data. The research shows that many of the ponds that newts call home are in fact of poor quality and unlikely to sustain them, or indeed other species, in the coming years. The results from the study, which used innovative computer modelling techniques and the Habitat Suitability Index, will help better protect the newts and focus future conservation efforts.

Despite this there is encouraging work going on to help great crested newts on our farmland. Natural England has been supporting land owners to look after newts and improve habitat condition through its Higher Level Stewardship scheme which can provide funds for surveys, pond restoration, in-field options and green corridors for the newts.

Creating a new home for badgers

Photo: iStock

Photos: Toni Harrington

Our ecologist Toni Harrington supervised the creation of an artificial badger sett in Harlow as part of mitigation works for future development. The artificial sett was located within 100m of an existing main sett and was constructed by The Badger Consultancy. Firstly a trench was dug approximately one metre deep, 2-3m wide and 15 metres long. Plastic tubes, which would act as tunnels, were then laid in the trench. Wooden stakes were driven in to keep the tubes in place and to create chambers for the badgers.

The sett was then backfilled with earth (although the chambers were not filled completely) and some earth was also placed inside the tunnels to enable the badgers to grip when passing through. To prevent earth falling into the chambers and to cover the sett, overlapping plywood boards were placed on top. More earth was then piled on top of the boards to completely cover them and about a metre of topsoil was added for insulation and then smoothed out.

The entrance holes to the plastic tunnels were left open and the earth next to the tunnel entrances was shaped to create an artificial spoil heap, making it more realistic for any passing badgers. The sett has been monitored on a weekly basis but there are no signs of badgers using it yet. Checks will continue over the next few months and peanut bait may be placed at the sett to encourage badgers to move in during the springtime. We will also be planting vegetation on top of the sett, partly to disguise it and also to provide the badgers with food and more permanent shelter.

Mitigation Guidelines withdrawn

Natural England has withdrawn the Reptile Mitigation Guidelines published in September of last year. Following feedback from consultation, they are seeking to clarify a number of areas in order to ensure that the guidance affecting planning applications is clear and consistent. Previous guidance must be observed until the revised document is re-released, which is anticipated next year.

Please contact The Ecology Consultancy, experts in Reptile Mitigation, for more information on how we can help you work with reptiles.

New stag beetle home in London

London and the southeast have the greatest concentration of stag beetles in the UK, and the London Borough of Lambeth has the highest density within that. The Ecology Consultancy was commissioned by ISG to produce a stag beetle interpretation board for the residents at the newly redeveloped Effra Road site in Brixton.

The board will explain the life cycle of this protected beetle and the habitat enhancements that have been made on the site. It is hoped that it will provide some local interest for the new tenants and help them understand the national importance of this small undisturbed site on their doorsteps. Our MD John Newton commented – “as a Brixton resident I often note stag beetles within the Rush Common open space that runs alongside Brixton Hill. I welcome our involvement with ISG to highlight to local residents the importance of conserving these spectacular and engaging insects”.

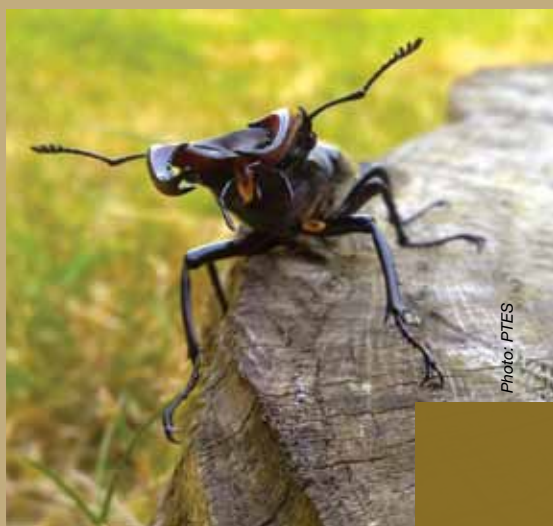


Photo: PTES

Expert ecology

Winter Bird Surveys

Photo: Philip Saunders

Phil Saunders is an ornithologist based at our London office and has been a keen birder since childhood. Phil has worked on a wide range of infrastructure projects with many located in proximity to the marshes and mudflats of the Thames Estuary and the South Coast.

Large expanses of these coastal areas are designated as internationally important Special Protection Areas (SPAs) and Ramsar sites, due to their outstanding wintering bird assemblages. When development is proposed in proximity to such sites the undertaking of Wetland Bird Surveys (WeBS) becomes essential to inform any potential impacts upon the sites.

WeBS are usually undertaken throughout the months of September to March, covering the core winter period of November to February and the migration periods either side. Large numbers of birds can be recorded during this period, with typical species on the South Coast being waterfowl (such as brent geese and teal) and waders (such as redshank, lapwing and dunlin). Tidal changes have a huge impact upon coastal bird species. Flocks actively forage on the open mudflats at low tide then conserve their energy during high tide, by roosting in elevated areas of habitat.

A typical coastal WeBS count follows the standard methodology created by the British Trust for Ornithology. Bi-monthly visits are made to a site; one visit during high tide and another during low tide, lasting approximately four hours each time.

During each visit our experienced bird surveyors will record the numbers and species present on a series of field maps, allowing the identification of key feeding and roosting areas. In addition to providing valuable data of use to planners and developers, the sight of wader flocks wheeling against the winter sky during such surveys is arguably one of the unforgettable winter experiences for the jobbing ecologist!

Expert Bat-training

The Ecology Consultancy's monthly Breakfast Briefings are going from strength to strength. Recently our Senior Ecologist and bat specialist, Sarah Yarwood-Lovett, teamed up with Kelly Gunnell, Built Environment Officer at The Bat Conservation Trust, for a talk covering aspects of enhancement and mitigation concerning bats and the planning and design of buildings.

Tamzin Davis, one of our Field Assistants, attended the session. "As well as highlighting the importance of bats for biodiversity, relevant legislation and the consequent need for sensitive and thorough survey, both speakers provided details of the life-cycles of these nocturnal creatures. They also looked at the ways in which planners and developers can work with building designers, to ensure bats are provided not only with species-specific roosts, but the means for foraging and commuting. This must have a very positive effect on the dwindling numbers of bats, and as well as that it can help developers to gain BREEAM or CSH credits for protecting ecology", she reported.

Wingspan of a Soprano pipistrelle *Photo: Melanie Oxley*

The expert team took their presentation to The Ideal Bat Show, hosted by Natural England.

The day was an opportunity to share knowledge and experiences relating to bat survey techniques, planning and licensing processes, engaging the public and effective mitigation measures for different bat species, which is currently being informed by emerging research.

The event was well-attended, with representatives from 20 different organisations and was reported in the Natural England newsletter.

Delegates at The Ideal Bat Show

Photo: Dr Sarah Yarwood Lovett

The Ecology Consultancy regularly runs Bat Briefing Sessions, both at our own regional offices or as CPD at clients' offices. Please contact us if you would like to attend or book a Bat Briefing Session.

Contact us at http://www.ecologyconsultancy.co.uk/contact.html or call **020 7378 1914**.

Saved! Buttersteep bat *Photo: Dr Sarah Yarwood Lovett*

The Ecology Consultancy has been involved in roofing works in Surrey, and carried out bat mitigation under Natural England EPSM licence. Living space in the roof of the building was to be extended, resulting in the loss of the roost. In advance of the works a dedicated bat loft was created in a nearby outbuilding, beside a treeline used by bats.

A single adult female brown long-eared bat was discovered during the removal of ridge tiles. The bat was tucked into the new roost, where hopefully more will follow. The replacement roost will be monitored over the next 2 years.

Bachelor boy

At one of our sites in Sussex, we found colonies of roosting bats in a roof-space. Our surveys were carried out to assist the fitting of fire prevention measures in a roof void without deterring the bats from using the roost.

The group found was a maternity colony of around 30 brown long-eared bats and a single serotine bat in the loft space, as well as common pipistrelle bats roosting in the soffits!

Bats use different roosts over the year: around March they emerge from hibernation and the pregnant females cluster in maternity colonies. These need to be very warm (upwards of 40°C) to enable the single offspring they have around June to be able to suckle and metabolise. The baby bats (pups) will start flying within 3 weeks.

Meanwhile, the male bats seek solitary 'bachelor pad' roosts to spend the summer in, so our lone serotine is probably a male bat.

The serotine bat is one of the largest species of UK bats, with a wingspan of 37cm. They like to hang on the inside of roofs, as do brown long-eared bats.

Photo: Dr Sarah Yarwood Lovett

Company News

London office

We welcome back Sasha Dodsworth from her secondment with AECOM, where she supplemented their in-house ecology team for six weeks. Victoria Forder had been similarly loaned out to ARUP during the summer.

Phil Saunders, Senior Ecologist, completed his MSc in Conservation Science and has returned to The Ecology Consultancy, principally to carry out winter bird surveys.

Lewes office

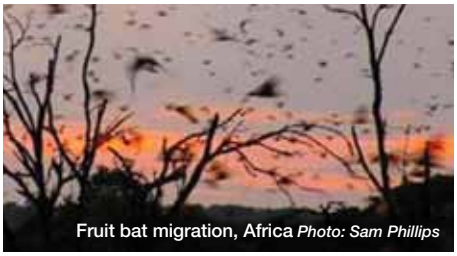
The Ecology Consultancy's Lewes office has joined the Sussex Wildlife Trust (SWT) as Business Members. Lewes staff Carly Jefferies and Giles Coe met Mark Anscombe from the Trust in November to receive the membership certificate. Although it was a cold day the setting was ideal as our Lewes office looks out onto Malling Down, one of the protected areas managed by the Trust and part of the Lewes Downs SAC and SSSI.

The Ecology Consultancy is a regular customer of the Sussex Biodiversity Records Centre (SxBRC) which is based with the Trust in Henfield. One of our early staff members in Lewes went on to work at the records centre once her contract was complete. We have long been supporters of the excellent work carried out by SWT.

Lewes joins Sussex Wildlife Trust

Norfolk office

We welcome back from maternity leave Dr Rachel Saunders, Principal Ecologist, who rejoins the team in January.



Fruit bat migration, Africa *Photo: Sam Phillips*

Sam Phillips took a two-month sabbatical in Zambia, to study fruit bats. He led a team from Bat Conservation International to observe the migration of straw-coloured fruit bats in Kasanka National Park. At peak activity, around 10 million bats were recorded.

Providers of essential training

We continue to offer CPD from all our offices, and have recently given well-received sessions to RICS and RTPI members. Please get in touch to arrange a session - 020 7378 1914

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