

## 2010 Devon Dormouse BAP meeting Stover Country Park 28 Sept 2010

### Attending

- John Avon and Devon County Council (Stover Country Park)
- Rob Ballard Devon County Council (Stover Country Park)
- George Bemment consultant
- Jen Bousfield (Cornwall Mammal Group)
- Stephen Carroll Devon Mammal Group (Stoke Woods, Orley Common)
- Paul Chanin consultant
- Janet Chapman (Andrews Wood, Lady's Wood, Hurrell Estate)
- Mabel Cheung (Stoke Woods)
- Linda Corkerton
- Katy Dermody
- Jan Ellis (Loddiswell Station)
- Kelvin Ellis (Loddiswell Station)
- Jackie Gage Devon Wildlife Trust (Andrews Wood, Lady's Wood, Sourton Quarry)
- Bronwen Gill
- Bryony (Billie) Gillett consultant
- Rebecca Golder
- Kim Golder
- Richard Green consultant
- Leonardo Gubert Enterprise Mouchel and Okehampton Dormouse Group (lots of sites!)
- Matthew Guy Devon Wildlife Consultants
- Katie Hadwin OPAL south west co-ordinator
- Leo Henly-Lock Teignbridge District Council (Orley Common) and
- TDC trainee
- Sally Hope Johnson FWAG
- Tracey Hamston Whitley Wildlife Trust/Paignton Zoo
- Julie Jamieson consultant
- Kate Lyon consultant
- Cheryl Mills University of Exeter Tremough Cornwall campus
- Chrissy Mason
- Cate McIvor Torbay Coast and Countryside Trust
- Lucy Morton National Trust
- Sue Myers National Trust
- Matt Neale consultant
- Mervyn Newman (East Devon District Council)
- Sophia Priddle Blackdowns AONB
- David Rickwood Woodland Trust officer for Devon
- Amy Roberts
- Anne Roberts (Stover Country Park)
- Sue Smallshire (Stover Country Park), consultant
- Susan Young and
- Stephanie Prickly Ball Farm wildlife rescue centre
- Bryan Thorne (Natural England, Yarner Wood)
- Janice Whittington (4 NDMP sites in N Devon)

### Apologies

- Ian Brooker Dartmoor National Park Authority (4 NDMP sites)
- James Chubb East Devon District Council
- Patricia Farrell
- Paul Gregory consultant
- Dave Groves (Cornwall Mammal Group)
- Tom Hynes North Devon Coast & Countryside Trust
- Sarah Jennings Devon County Council County Ecologist
- Ellie Knott or rep. Devon Biodiversity Records Centre
- Chris Moulton Exeter City Council (Stoke Woods)
- People's Trust for Endangered Species representative
- Jeremy Sabel (Plymouth City Council)
- Ali Slade
- Kate Stokes South West Water
- Andrew Taylor
- Anthony Wates and Richard Miller
- Simon Wiltshire Aggregates Industries
- Rob Wolton (Devon Hedge group)

Brackets= not representing organisation in official capacity today / NDMP sites monitored

## Notes from talks

Where possible, ppt presentations are posted on Devon Dormousers yahoo group page <http://pets.groups.yahoo.com/group/devondormousers/>

## Introduction

- This was our 4th annual meeting, convened under the Biodiversity Action Plan for dormouse in Devon, for which Devon Wildlife Trust is county champion agency
- Thank you to Rob and Stover for hosting the day, Stephanie for the dormouse biscuits, speakers, and to all attendees

## Dormouse research at University of Exeter update – Cheryl

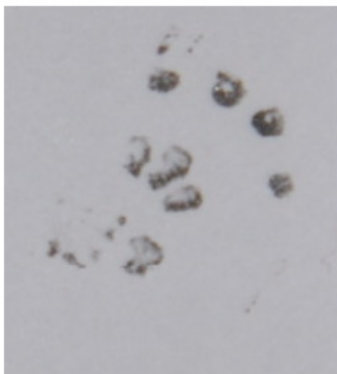
Latest news on 3 studies based at University of Exeter Cornwall campus

### **Hibernation study**

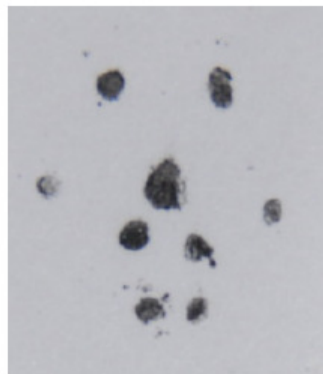
- Investigating effects of food quality available during the hibernation period, and of temperature and day length fluctuations, in captive animals at Paignton Zoo
- Dormice in two treatment groups compared: high calorie and low calorie diet. Ambient temperature was data logged every 15 mins. Two behavioural types identified: 'active' dormice, with short hibernation bouts, and 'inactive' dormice, with long sustained hibernation bouts
- Inactive, long-bout dormice did not respond to diet quality; active, short-bout dormice did: dormice given a high calorie diet had fewer hibernation bouts than those given lower quality food
- Increasing air temperature and day length reduced hibernation bout length. Temperature had the most effect. If food was present dormice did not return to hibernation as much
- This has implications for how dormice might be able to cope with changing climatic conditions
- Results submitted for journal publication – awaiting decision

### **Detection methods trials**

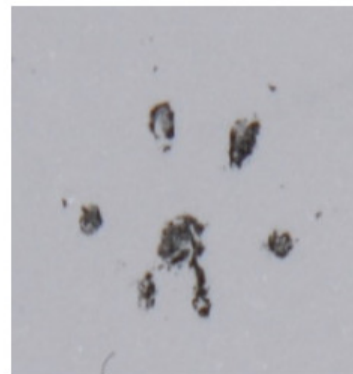
- Exploration of a range of additional survey methods to boxes, tubes, and nut hunts, looking at camera traps at baited food stations, and footprint tubes
- Some initial questions were: can dormouse footprints be distinguished? Will dormice visit baited food stations? Is current image quality sufficient to identify dormice conclusively?
- **Footprint recording.** Dormice feet are distinguishable from other small mammals that might be able to run through a dormouse tube. In dormice the four toes often are in a line, whereas in other small mammals the toes are in an arc. Dormice feet also often show 3 pads behind the toes, plus two large polygonal heel marks – in other small mammals there are often 1-2 pads shown, and heel marks, if shown, are shaped more as round dots



Dormouse



Wood mouse



Bank vole

- Ink carbon compound has been used. Veterinary advice was that this was not expected to cause any harmful effects

- Initial results are promising. Further development of dedicated Wildtrack software is being carried out, plus comparisons of accuracy with tests by eye, and in sites with lower dormouse densities
- **Camera traps** may be a viable technique to give evidence of dormouse presence at a site. These are being trialled at 5 feeding stations at a site in Cornwall (which is part of NDMP so is known to have a dormouse population, and which boxes are occupied). Footage is automatically taken day and night whenever motion sensors are triggered. The number of days taken for dormice to start using the feeding stations was monitored. Camera footage was downloaded every 1-3 days
- All 5 feeding stations picked up definitive footage of dormice within 21 days. The earliest footage was taken 7 days after installation.
- There were squirrel problems. It will be interesting to see if the technique works at sites where there is a lower or unknown dormouse density
- The cameras are also picking up interesting behavioural observations between individuals and between dormice and woodmice

### **Genetics studies**

- Funded by PTES, to investigate population structure in the south west, relating this to landscape scale factors such as habitat area and isolation, and identify barriers to dormouse dispersal. DNA analysis has been used in this way for other species such as bears, primates and deer
- 350 samples (tufts of guard hairs) have been collected so far, from NDMP monitoring and from dead animals sent to Paignton Zoo for post mortem
- Current work is establishing laboratory protocols. DNA analysis has been started and there are no results yet

### **Help needed:**

- dormouse DNA samples collected from across the region, including all areas in Devon, especially in the north and east. Cheryl can either come and take the samples herself, or if willing train you how to take samples and then provide the collecting equipment. You would be working under her Natural England licence to take these samples.
- (we could look into holding a training session on taking samples if there are a number of people interested)

Cheryl's powerpoint not available on Devon Dormousers website – for any queries please contact Cheryl [cam223@exeter.ac.uk](mailto:cam223@exeter.ac.uk)

## **Dormice and development update** - Stephen

An overview of latest changes to planning legislation

### **Legal status**

- IUCN status was revised in 2009: *M. avellanarius* is now 'of least concern', whereas previously it was 'low risk (near threatened)'
- Dormouse is a Species of Principal Importance listed under section 41 of the NERC Act 2006

### **Planning system documents**

- The key planning document is PPS9. Presence of a European Protected Species (EPS, such as dormice) is a material consideration in planning applications. Where there is a 'reasonable likelihood' of EPS being present and 'affected by the development', surveys must be carried out and any required mitigation plans submitted before the application is determined. A new version of PPS9 was drafted in 2010 and has been consulted upon (the provisions for EPS are unchanged in the draft). What constitutes 'reasonable likelihood' and 'affected by the development' is open to some interpretation; Natural England standing advice is due to be issued and might be said to cover these (see below)
- Some aspects covered in the old PPS9 (green infrastructure etc) are to come under a new PPS: Planning for a Natural and Healthy Environment. Consultation for both PPSs closed on 1 June 2010
- A new version of the Habitat Regulations was published in 2010. This incorporates changes brought about through the passing into law of the new Marine Act, NERC Act Species of Principal Importance list etc. For EPS the Regulations applying to licences for

EPS now have different numbers: Regulation 39 is now Regln 41; Regln 44 is now 53; Regln 48 (SACs) is now 61

### **'Disturbance'**

- In 2008 threshold for 'disturbance' under European legislation was raised, and some Natural England guidance has been published to help define 'disturbance' *i.e.* when a Euro licence (under Regln 41, formerly 39) is needed. The NE guidance advises that, as a standard nestbox check usually does not lead to abandonment of a litter, actions would have to exceed this to be considered 'disturbance'. Also actions affecting a group of 2-3 non-breeding adults would likely not be considered 'disturbance' to a 'significant group'
- Presumably disturbance is to be assessed on a case by case basis, though some planning applications have taken this to mean that more than 3 dormice must be affected before a licence is needed. As the revised disturbance threshold is now different than for the Wildlife & Countryside Act "some survey work which does not require a licence under the Habitats Regulations, because of the raised threshold for the 'disturbance' offence, may still require a licence under the W&C Act 1981 ... Lower levels of disturbance, which are not an offence under the Habitats Regulations, may be an offence under the W&C Act ..." (new PPS9, para 138) *i.e.* a Schedule 5 licence under the W&CA would still be needed. Responses from Natural England seem to suggest that works affecting 0.1+ha area of habitat may be taken as a threshold for 'disturbance', which equates to 100m+ of hedge (is this too much hedge?). Following verbal queries to NE, further guidance on 'disturbance' and licensing is apparently to be issued in 2011

### **NERC Act 2006**

- The Biodiversity Duty, under the NERC Act 2006 has been tested in a case involving a population of toads, a Species of Principal Importance under the NERC Act, in East Anglia. The Local Authority ignored County Wildlife Site status and reports of protected species. The LA was criticised by the Local Government Ombudsman and was asked to grant the complainants £100. Dormice are also Species of Principal Importance, though receive higher levels of national and European protection

### **Case law**

- Two recent Appeal cases, both involving bats, have a bearing on developments affecting EPS. From the Woolley vs East Cheshire Borough Council case June 2009, Local Planning Authorities have a duty to consider the '3 tests' when making planning decisions, and cannot discharge this by including a planning condition that a NE licence has to be obtained. One implication is that consultants' ecological reports may be required to cover this in future
- From the Morge vs Hampshire County Council Court of Appeal ruling June 2010, planning authorities must consider 'indirect' impacts of development to breeding and resting places; however vegetation clearance was not 'deliberate disturbance', and impacts on EPS must affect populations, not individuals. The implication is that breeding and resting places, *i.e.* nests, are protected under the Habitat Regulations, but removal of intervening or potential habitat is not considered to have a detrimental impact on breeding or maintenance of natural range. Leave to appeal to the Supreme Court has been granted – decision is due on 10 December 2010

### **Natural England standing advice**

- Natural England withdrew from routinely commenting on applications involving EPS in 2009. NE standing advice is to be issued. This has been trialled in the south east region, and is to be applied nationally, following consultation on draft standing advice (which ended on 29 Sept 2010). The draft standing advice gives indication of when EPS surveys are needed (*i.e.* guidance on 'reasonable likelihood' and if 'affected by development'), acceptable survey effort, and generic mitigation guidance. This appears to be verbatim the south east standing advice, the conclusions of the SW nesting tubes study report, and the NE Dormouse Conservation handbook 2nd edition
- Survey and mitigation guidance is very general and does not give a view on non-optimal habitat, or on particular mitigation measures such as fencing or bridges, nor does it take account of regional differences
- The standing advice consultation states that "where local protocols are in place they will run alongside the standing advice". Devon County Council, in partnership with a number of Devon planning authorities, local consultants and NE, has been developing some Devon-specific planning application validation criteria, which would fulfil this role. NE have expressed a view that developments over 0.1ha would trigger the need for a

phase 1 survey (c.f. 'disturbance' guidance above). Wider consultation and official endorsement by local NE is anticipated. (If you would like to be involved in this process please contact Stephen for further information)

### **Mitigation techniques**

- There was a brief discussion of specific mitigation techniques e.g. cat fencing and what should be considered effective. Some local examples (Teignmouth and Dawlish) were described. Indications from NE and new government were that a 'bio-banking' approach (s106 or other offsite mitigation money to form a fund, from which targeted conservation schemes could be funded) was gaining favour. Due to time constraints this was not explored further, but practical mitigation techniques would seem to be a subject that could be discussed in more detail at a future, or separate, meeting

### **Biodiversity Action Plans**

- Biodiversity Action Plans are being revised and repackaged as Biodiversity Integration Groups (BIGs), which combine species and habitat action plans under wider habitat types. Dormouse is listed under the woodlands BIG, as well as others (e.g. farmland BIG, because of hedges). The BIGs would be used to target agri-environment grants etc. A number of large landscape scale project areas, Integrated Biodiversity Delivery Areas (IBDAs), have been nominated for priority funding. In the first round of these an IBDA comprising the South Devon coastal strip, from Tamar Valley to Exminster, has been chosen, in which there would be support for a range of habitat restoration and landscape schemes. Landscape scale approaches are expected to be one of the main recommendations of the Lawton Report on biodiversity conservation, published in September 2010, which will inform the forthcoming government white paper in spring 2011.

### **Schedule 5 licence references**

- For those working towards a Schedule 5 handling licence, and for trainers/referees, NE has published a reference template  
[http://www.naturalengland.org.uk/Images/wmlar01\\_tcm6-9480.doc](http://www.naturalengland.org.uk/Images/wmlar01_tcm6-9480.doc)

### **Links**

Natural England EPS (including dormice) disturbance guidance

[http://www.naturalengland.org.uk/Images/esisgd\\_tcm6-3774.pdf](http://www.naturalengland.org.uk/Images/esisgd_tcm6-3774.pdf)

NE draft national standing advice on EPS, including dormice

<http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/natconsultation.aspx>

<http://www.naturalengland.org.uk/ourwork/planningtransportlocalgov/spatialplanning/standingadvice/protectedspp.aspx>

[http://www.naturalengland.org.uk/Images/Dormice%20DRAFT\\_tcm6-21704.pdf](http://www.naturalengland.org.uk/Images/Dormice%20DRAFT_tcm6-21704.pdf)

HRA licence

[http://www.naturalengland.org.uk/Images/wml-g12\\_tcm6-4116.pdf](http://www.naturalengland.org.uk/Images/wml-g12_tcm6-4116.pdf)

Referee guidance

[http://www.naturalengland.org.uk/Images/wmlg03\\_tcm6-4065.pdf](http://www.naturalengland.org.uk/Images/wmlg03_tcm6-4065.pdf)

Sched 5 licence application new template

[http://www.naturalengland.org.uk/Images/wmlar01\\_tcm6-9480.doc](http://www.naturalengland.org.uk/Images/wmlar01_tcm6-9480.doc)

New PPS9

<http://www.defra.gov.uk/corporate/consult/biodiversity-geological/index.htm>

New PPS Planning for a Natural & Healthy Environment

<http://www.communities.gov.uk/publications/planningandbuilding/naturalenvironmentconsultation>

The Conservations of Habitats and Species Regulations 2010 (The Habitat Regulations 2010)

[http://www.legislation.gov.uk/uksi/2010/490/pdfs/uksi\\_20100490\\_en.pdf](http://www.legislation.gov.uk/uksi/2010/490/pdfs/uksi_20100490_en.pdf)

Lawton Report 'Making Space for Nature'

<http://www.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

## Highways Agency Biodiversity Action Plan dormouse monitoring –

Leonardo

- Enterprise Mouchel are contracted by The Highways Agency to carry out ecological work for the motorway and trunk road network
- There is a Highway Agency Biodiversity Action Plan which includes among other activities monitoring schemes for dormice
- The Area 1 Highways Agency network covers the A30 and A38. There are dormouse box schemes at Haldon Hill, Tinkers Lane and Blackpool Wood on the A38 and at Penlan and Okehampton & Station Wood on the A30
- The central reservation at Haldon Hill is approx. 2km long and varies in width from a few metres to ~60m. There are 30 boxes here, which have provided evidence of breeding dormice
- At Okehampton there are 2 Highways Agency sites plus 5-6 sites covered by Okehampton Dormouse Group (taking on some of Gordon Vaughan's old sites)
- Penlan near Bodmin in Cornwall is the site where microchipped animals have been monitored crossing the A30. The site is divided into 9 sections, on verges of both carriageways and in the central reservation, with a total of 100 nest boxes and 200 nest tubes. Monitoring is carried out monthly April – November, starting from April 2007. Each dormouse has been microchipped, with 62 tagged so far over 4 years. Dormice have been recorded in 7 of the 9 sections; breeding has been recorded in 5 sections
- A tagged individual recorded in April 2007 and May 2008 in locations 80m apart had evidently crossed a minimum of 12m at ground level including 8m of tarmac. Another animal was recorded crossing the road in 2009. Of the 62 animals, different individuals have been recorded using one section, which suggests there may be a high degree of movement, and a metapopulation structure. Other observations are that dormice have been found, and recorded breeding, in small habitat patches of <1 hectare. Adult weights, breeding patterns and dispersal have been within ranges reported elsewhere. Females have appeared to share boxes readily, unlike males
- Two further central reservation sites with dormouse populations have since been identified
- The work provides some baseline data on use of fragmented habitats. Further study might look at dispersal and other movements across carriageways, genetics (e.g. relatedness between animals on different sides of the road), and comparisons with other road sites

**Help needed:** opportunities to help with monitoring at Okehampton sites

Contact [Leonardo.Gubert@enterprisemouchel.com](mailto:Leonardo.Gubert@enterprisemouchel.com)

## Great Nut Hunt 2009-2010 update – on behalf of PTES

- National dormouse distribution information is available from the 1895-1910 period, and from a national survey carried out for The Mammal Society in the late 1970s. This used evidence of characteristically nibbled hazel nuts to assess presence/absence
- PTES organised Great Nut Hunts in 1993 and 2001 using this technique, to monitor known sites, generate new records, and for public awareness and participation
- PTES also administers the National Dormouse Monitoring Programme (NDMP: regular nestbox checks at participating sites, of which there are approximately 20 in Devon). From this combined information PTES keeps a national inventory of dormouse records. This has been used to generate a number of 'hotspots' where there are concentrations of records and NDMP sites. There are 5 of these in Devon and 2 in Cornwall
- A further nut hunt was organised for 2009, also to commemorate 21 years since the start of the NDMP. This was entitled the 'Golden Great Nut Hunt'. To promote the project there are 20 flags hidden in woodlands across the country. Anyone finding a flag can claim a commemorative silver hazel nut. There is also a single flag to win a gold nut. Currently some of the silver nut flags have been found but the gold nut is still not claimed. A dormouse shaped cookie cutter to make themed biscuits for promotional dormouse tea parties, and commemorative NDMP duster box bungs were sent to dormouse monitors
- Volunteers willing to take part in the 2009 Nut Hunt are encouraged to register with PTES, who can send out information survey packs and allocate sites to be checked

- Because of poor weather conditions, the Golden Great Nut Hunt is to be extended through 2010. As well as presence/absence there is an option to collect further information about woodland structure, plant species present, and other factors
- In Devon 46 nut hunt searches have been submitted to PTES so far (as of 20 Sept 2010). 33 of these have provided evidence of dormouse presence through hazel nuts either opened or chewed by dormice. There are many sites in Devon and a large number still needing to be checked (94). If you can help please contact PTES. (Lists of sites checked and still needing to be checked are given below, ordered by district; a few are NDMP sites and presumably would not need to be surveyed as a priority)
- In 2009 the Devon dormouse group also ran a series of training workshops, part supported by a Devon Mammal Group grant, and some Devon Wildlife Watch groups and Devon Hedge Week organisers also got involved, to encourage public participation. Although we tried, this was not particularly well synchronised with the national project. There are not the resources to repeat workshops for 2010; however Devon dormouse group does have access to some of the survey leaflets and information, if anyone would like to survey Nut Hunt sites
- Thank you to PTES for supplying this latest information about the 2009-2010 nut hunt
- P.S. PTES have also recently published a leaflet describing their current dormouse projects in England and Wales

**Help needed:** anyone willing to survey a Golden GNH site, please contact:

PTES Great Nut Hunt

<http://www.ptes.org/moremammals/gnh/>

Golden Great Nut Hunt

PTES

15 Cloisters House

18 Battersea Park Rd

London

SW8 4BG

Tel. 020 7498 4533

[www.greatnuthunt.co.uk](http://www.greatnuthunt.co.uk)

Nida Al Fulajj

[Nida@ptes.org](mailto:Nida@ptes.org)

[enquiries@ptes.org](mailto:enquiries@ptes.org)

## **OPAL hedgerow survey – Katie**

- Apologies for the technology glitch which meant Katie's presentation could not be shown (pdf version to be available on the Devon dormousers yahoo group page?)
- The Open Air Laboratories (OPAL) Biodiversity Survey is a national project in partnership with the British Museum (Natural History) aimed at encouraging interest and participation in amateur biodiversity recording
- A number of survey projects have been compiled. Individuals, schools, education groups, Watch groups have all taken part. Participants can attend training workshops and/or download resources from the OPAL website
- Past surveys have included lichens, earthworms, and ponds. The latest survey is to look at hedgerows, with the hedge survey project running from Sept 2010 to summer 2012
- The hedge survey involves looking at hedges in rural and urban areas (*i.e.* including garden hedges), to:
  - Complement the DEFRA Hedgerow survey supplying data which can better inform decision makers concerning the Biodiversity Action Plan (BAP) for Hedgerows, especially for urban hedges
  - Be the first national hedge survey to include urban hedges
  - Provide data which can be used to answer scientific questions, for example:
    - How important are hedges within an urban context?
    - Are urban hedges less diverse than rural counterparts?
    - How does hedge structure influence the diversity of life in the hedge?

- Identify potential new BAP priority habitat hedges
  - Identify hedges which are of conservation concern and draw these to Hedgelink's attention
  - Activities are suitable for formal education projects, from national curriculum Key stage 1 to university level, and might link to other initiatives such as Hedge week, Hedgelink, iSpot (and Devon Hedge week and general hedgerows for dormice work)
  - The OPAL hedgerow survey involves recording hedge location, plant species, invertebrate species, animal signs etc. There are survey forms and FSC style laminated identification guides. Results can be submitted via the form or OPAL website. Participants can survey as many hedges as they wish. As the survey progresses, results are posted on the OPAL website, building up a national overview
- Help needed:** please take part in OPAL hedge survey

[www.OPALexplorenature.org](http://www.OPALexplorenature.org)  
[www.iSpot.org.uk](http://www.iSpot.org.uk)

Hedgerow survey results and downloads <http://www.opalexplornature.org/BiodiversitySurvey>  
 OPAL south west projects <http://www.opalexplornature.org/SouthWest>

Katie Hadwin OPAL community scientist [Katie@moortrees.org](mailto:Katie@moortrees.org)  
 tel. 0845 4569803

After Katie goes on maternity leave try Bethan Stagg [Bethan@moortrees.org](mailto:Bethan@moortrees.org)

## Discussion and matters arising

- Stover guided walk. Rob described past history of monitoring at the site. Proximity to the A38 did not seem to dissuade dormice from using boxes in those areas. Dormice would have had to have crossed stands of pure Rhododendron to use some boxes. This has implications for site management, as Rhododendron is meant to be removed towards heathland restoration
- **Help needed**
  - Cheryl needs DNA samples, which might be taken during nestbox or tube checks, or from any dead animals found. Cheryl can come along on a nestbox or tube check to take samples, or if there is general interest in gaining training and licensing for this, we could look into running a training workshop. Contact Cheryl [cam223@exeter.ac.uk](mailto:cam223@exeter.ac.uk)
  - Tracey (Paignton Zoo) asks for ideas for student projects on dormice e.g. habitat, nesting, feeding studies. Paignton hosts a number of undergraduate and postgraduate placements for final year projects and dissertations. Dormouse projects have been popular in the past. Paignton carries out captive breeding so there may be options for behavioural studies or comparisons with wild populations. Rob would be interested in hosting studies of tracking movements through the different habitat areas at Stover. Tracey [Tracey.Hamston@paigntonzoo.org.uk](mailto:Tracey.Hamston@paigntonzoo.org.uk) Rob [robert.ballard@devon.gov.uk](mailto:robert.ballard@devon.gov.uk)
  - Is anyone able to help with Great Nut Hunt 2009-2010 sites (list below)? If so please contact PTES Nida Al Fulaij [Nida@ptes.org](mailto:Nida@ptes.org) or [enquiries@ptes.org](mailto:enquiries@ptes.org)
  - Please take part in the OPAL hedgerow survey
  - There are opportunities to help Leonardo monitor box sites around Okehampton [Leonardo.Gubert@enterprisemouchel.com](mailto:Leonardo.Gubert@enterprisemouchel.com)
  - Practical experience towards Schedule 5 Dormouse handling licence: there are ~20 box schemes in the NDMP in Devon; some dormouse monitors for these sites are indicated on the list of attendees. If you can offer experience or are willing to take on trainees, or if you are seeking training, or need help setting up a new monitoring site, please let Jackie or Stephen know [Jgage@devonwildlifetrust.org](mailto:Jgage@devonwildlifetrust.org) or [every\\_creeping\\_thang@yahoo.co.uk](mailto:every_creeping_thang@yahoo.co.uk)
- Pennon Environment Fund grant funded South West Water to carry out a dormouse project in Devon and Cornwall in 2009-11. This has involved a seminar in August 2009, interpretation material for a best practice site (Lady's Wood), and providing nestboxes for current and new box schemes. New schemes are to be set up in Devon at Halsdon



(DWT reserve, West Devon), Ashclyst Forest (National Trust, East Devon), and Huntshaw (Clinton Devon Estates, West Devon) in due course, and replacement boxes provided for Bagbeare on the Tarka Trail

- **'Bring a box' nestbox designs**

Thank you to those who bought examples. Advantages and disadvantages were discussed:

- Hinged lids are generally considered unsuitable because lids can fall shut on occupants. Sliding lids are preferred, but then a suitable attachment mechanism is needed. Interior battens under the lid are common, though these can restrict visibility, and have the potential to trap and crush box occupants if the lid is shut back down too quickly
- Box types with metal fixtures attached to wood tended to become stiff and unmanageable as wood became damp and swollen
- Alana Ecology-bought boxes (marketed as 'heavy duty' and 'to Highways Agency standard') are huge and heavy to handle (and take lot of nest material to fill) but are very sturdy
- A design sold by Envisage (Swindon) has a detachable lid, held in place by nails, poked through rubber strips, which slide into holes in the lid sides, drilled into interior lid battens. These are OK but length of rubber means nails slide in at an angle instead of horizontally, whereby nails sometimes get stiff and stuck. After 2 years of using these, rubber has remained intact and not perished
- CJ Wildbird box marketed as 'dormouse hibernation box' (though actually a normal nestbox) has steel inverted L shape pins which swivel round to hold lid down. The pins can be a tight fit and get very stiff if wood swells. Also battens and angle of lid mean it is often not easy to raise the front edge up when inspecting, nor replace the lid quickly – this has led to escapes. Smallish box size. These are constructed from planed timber sections rather than plywood, and may have been chemically treated, but experience at one site has been that the boxes have lasted well, and have been used within 1 month of installation



Alana Ecology heavy duty c£15



metal slide for roof c£13



supplied by Envisage c£10



supplied by CJ Wildbird c£11



supplied by NHBS c£20



woodcrete dormouse box £40

- A type supplied by Kent Wildlife Trust was recommended during discussion of box designs on the national Google dormouse forum. No one had experience of using woodcrete boxes



Kent Mammal Group box £9 + £1 p+p

- Box plans on the web:
  - <http://www.greenlivingcentre.org.uk/iwg/wildlife-homes/Dormouse-TypeA-simple.pdf>
  - <http://www.ptes.org/index.php?page=310>
- Tom *et al.* at North Devon Coast & Countryside Trust have designed a box with a sliding perspex 'inner' lid, which allows the inside of the box to be inspected while still retaining a cover. Janice uses a portable piece of perspex in the same way. Both work well. Janice will try to get hold of copy of ND C&CT design
- PTES can supply boxes at cost for £2 each (not incl. carriage), made by Doncaster prison. A bulk order, e.g. for a complete 50 box scheme, would be possible through Nida at PTES. An example of this box type obtained for Stover was roughcut softwood, with a detachable lid held in place by wire over the top of the lid to the front of the box. As (presumably untreated) softwood these would not be expected to be as durable as marine ply, but the unit cost is the same as nest tubes. If interested in a bulk order (50+, and potentially reducing carriage costs) please let Anne or Stephen know (Sue and Torbay Coast & Countryside Trust have expressed an interest in this)
- STOP PRESS: Rob has been in contact with Denbury prison, who can, by bulk order only, provide costed boxes made from 12mm marine ply or tanalised timber (marine ply is actually cheaper). Minimum order of 100-500: marine ply £3.36 each; sawn tanalised £3.57 each; for orders 600-1000 £3.12 and £3.32 respectively. The prison is also able to quote for any other wildlife box types, if provided with specifications and template. Please let Rob [robert.ballard@devon.gov.uk](mailto:robert.ballard@devon.gov.uk) (or Stephen) know if you would like to join in with the bulk order (would be in the current financial year? If so please let us know in good time if you need these boxes for the 2011 survey season)
- Kelvin described experiments with terracotta artificial hibernacula made from ridge tiles and an inverted flower pot with an entrance hole, similar to a 'toad pot', trialled at Loddiswell station. Placed on the ground beneath trees with nestboxes, some were found to contain dormouse winter nests made from *Sphagnum* moss. Shrews and

woodmice summer nests were also found, and some nut stores - which would give any dormice using the hibernacula a free lunch! See *Dormouse Monitor* Spring 2010 p. 7



Loddiswell lodges

- **Box checking protocols**

- Is monthly checking of boxes too frequent, and does this cause unnecessary disturbance? Checking once every 2 months may not make a difference on sites which have a relatively high density population; at low density sites animals might be more likely to be missed. Over the whole of the NDMP how consistent does the box checking protocol need to be to gather meaningful data?
- When weighing, is it better not to handle the animals at all if possible? Janet and others use clear plastic tubs, pre-weighed with the weight of the tub written on. This works quite well. Often animals can also be sexed without handling
- When should bird and old nests be removed? Does leaving some nest material, or, for a new box, 'seeding' with nest material, encourage use? This might be studied. Do bird nest parasites necessarily affect dormice? Many box checkers leave old nests *in situ* until the end of the season, unless the material gets wet or rotten in the meantime. This year rudimentary nests of leaves and moss were found, which might normally have been interpreted as wood mouse nests or starts of bird nests, except that dormice were present in them. Earlier in the year dormice were found in boxes without any nesting material at all
- How far do people go through the check during the bird nesting season? Generally a box containing an active bird nest was left rather than disturbed (for which a separate licence is needed). Dormice were found in some of the high bird boxes at Stover

- **Dormouse filming.** Cheryl used a 'Scout' camera system. Jen uses security cameras with USB DVR software which can record/display from up to 4 locations simultaneously; there is also a 'snapshot' function, though the image quality on screen is disappointing. Some dormouse footage is viewable at:

Nestbox cam Google forum <http://www.youtube.com/watch?v=a1XXwQ8tp2g>

BBC programme excerpts

[http://www.bbc.co.uk/nature/species/Hazel\\_Dormouse#p007yxcc](http://www.bbc.co.uk/nature/species/Hazel_Dormouse#p007yxcc)

ARKive

<http://www.arkive.org/common-dormouse/muscardinus-avellanarius/>

Local BBC at Lady's Wood DWT reserve

[http://news.bbc.co.uk/local/devon/hi/people\\_and\\_places/nature/newsid\\_8284000/8284834.stm](http://news.bbc.co.uk/local/devon/hi/people_and_places/nature/newsid_8284000/8284834.stm)

- We were unable to cover these topics, which might be discussed at a future meeting
  - Monitoring in hedges
  - The year's nestbox checks: overview of results

- Next meeting – there was interest in continuing annual meetings. For 2011 we would look for a central Devon location (Okehampton area?) If anyone would like to help organise this or has ideas for suitable venues, please let us know

Jackie Gage [jgauge@devonwildlifetrust.org](mailto:jgauge@devonwildlifetrust.org) Stephen Carroll [every\\_creeping\\_thang@yahoo.co.uk](mailto:every_creeping_thang@yahoo.co.uk)

2009-10 Nut hunt Devon results so far (extract – habitat survey data not shown; highlight = positive record)

id	Date of survey	Wood	Nearest town	LPA	Hazel +/-	Nuts no	Dmse chewed	Dmse opened
18	17/10/2009	Simms Hill wood	Ilminster	Dartmoor	y	25	25	11
117	30/09/2009	Hedge in garden	Lustleigh	Dartmoor	y	36	15	19
24	13/10/2009	Hayne Down Copse	Manaton	Dartmoor	y	1	1	1
143	13/10/2009	Water Gate Marsh, Bittleford	Widecombe	Dartmoor	y	40	0	3
88	12/10/2009	Found in a pasture field	Upton Pyne	Devon	y	0	5	0
100	24/10/2009	Beacon Hill	Axminster	East Devon	y	7	0	0
101	24/10/2009	Churchill Bridge/ Stream	Axminster	East Devon	n	4	2	1
102	24/10/2009	Beacon Hill Hedge	Axminster	East Devon	y	37	2	0
128	24/10/2009	Churchill Bridge/ Stream	Axminster	East Devon	y	23	6	3
20	18/10/2009	Land Range (adjacent lane due to access diffs)	Aylesbeare	East Devon	y	100	5	2
121	12/10/2009	Bottom of Branscombe Primary school hill	Branscombe	East Devon	n	100	1	1
142	05/10/2009	area beside the school	Branscombe	East Devon	y	6	1	1
35	24/10/2009	Garden - Higher Burrowton	Broadclyst	East Devon	y	8	0	0
98	18/10/2009	Ashclyst Forest	Broadclyst	East Devon	y	30	0	0
273	10/10/2009	Ashclyst Forest	Broadclyst	East Devon	y	30	2	0
414	20/02/2010	Ashclyst forest	Broadclyst	East Devon	y	44	0	0
27	01/01/1970	in the garden surrounded by old hedges	Colyton	East Devon	y	8	8	1
136	01/11/2009	(Private wood)	Tipton St John	East Devon	n	12	5	9
224	30/10/2009	NE Hedge Corner of Lancercombe nurseries	Tipton St. John	East Devon	y	3	3	3
25	01/01/1970	not given	Cove	Mid Devon	y	0	0	1
346	04/10/2009	knowle house garden/knowles wood	kerswell	Mid Devon	n	0	2	0
391	01/01/2010	West Manley Lane	Tiverton	Mid Devon	y	30	0	0
381	06/03/2010	Sauls Farm Wood	Wembworthy	Mid Devon	y	6	4	3
221	28/12/2009	Bradley Wood	Withleigh	Mid Devon	y	46	8	1
222	15/11/2009	Pymms Wood	Withleigh	Mid Devon	y	19	4	1
131	12/10/2009	Heartland trail	Zeal Monachorum	Mid Devon	y	100	4	2
134	16/10/2009	not wood (Moreton Campus/ Kingsley College)	Bideford	North Devon	y	100	0	1
122	06/09/2009	Orchard at Park Mill	Chulmleigh	North Devon	n	0	0	2
349	06/09/2009	Devonport leat, Burrator reservoir	Dasland	Plymouth	y	100	0	0
161	05/10/2009	Dawes Lane	Elburton	Plymouth	y	9	1	0
251	20/11/2009	Kennel Lane (hedge)	Ivybridge	South Hams	y	18	0	0
216	01/11/2009	The Good Earth Barns at Rattery Mill	Rattery/ South Brent	South Hams	y	100	20	0
26	18/10/2009	Owley Cottage Garden	South Brent	South Hams	y	81	28	10
32	11/10/2009	Penstave Wood	South Brent	South Hams	n	100	6	5
115	04/10/2009	double hedge track above Aish	South Brent	South Hams	n	68	20	9
38	01/01/1970	Garden (above address)	Dunchideock	Teignbridge	y	0	0	0
255	26/11/2009	Riverside Ogwell Mill	East Ogwell	Teignbridge	y	80	0	0
95	12/11/2009	Kenton	Kenton	Teignbridge	y	55	8	0

116	14/10/2009	Colly Brook	Luton Nr. Newton Abbot	Teignbridge	y	95	26	9
227	22/10/2009	Hedge along footpath	Buckfast Church lower town	T'bridge or D'moor	y	100	2	2
144	03/11/2009	Garden	Burrington	Torridge	y	100	0	4
28	18/10/2009	Volehouse South Wood	Woolfardisworthy	Torridge	y	0	6	3
344	27/09/2009	Okehampton old park	Okehampton	West Devon	y	20	0	0
347	06/06/2009	Burrator Lodge	Dasland	W Devon/D'moor	y	100	0	0
348	06/09/2009	Burrator woods north shore	Dasland	W Devon/D'moor	y	100	0	0
123	26/09/2009	Hedge along public footpath	South Zeal	W Devon/D'moor	y	65	6	6

### Nut Hunt 2009-10 sites still needing to be checked

	Wood Name	Town	Grid Ref	Area
1	Tottiford Reservoir	Coombe	SX807836	Dartmoor
2	Hedge, south of Castle remains	Gidleigh	SX671884	Dartmoor
3	Trenchford Reservoir	Hennock, Dartmoor	SX804825	Dartmoor
4	Hooper Hayes Copse	Landscope	SX772675	Dartmoor
5	Hisley Wood	Lustleigh	SX777808	Dartmoor
6	Holne Moor	Michelcombe	SX6969	Dartmoor
7	Butterdon Ball Wood	Moretonhampstead	SX755890	Dartmoor
8	Bowda	North Bovey	SX740834	Dartmoor
9	Coombe	Sandy Park	SX718897	Dartmoor
10	Coombe Wood	Sandypark	SX718897	Dartmoor
1	Woods south of St Cyres' Hill	Awliscombe	ST145023	East Devon
2	Land Range	Aylesbeare	SY048920	East Devon
3	Couchill Woods	Beer	SY232904	East Devon
4	East Ebb	Beer	SY233891	East Devon
5	Berry Cliff	Branscombe	SY1988	East Devon
6	Pit Coppice	Branscombe	SY192885	East Devon
7	Stockham's Hill	Branscombe	SY208886	East Devon
8	Morganhaye Covert	Colyford	SY218925	East Devon
9	Morganhayes Covert	Colyford	SY218923	East Devon
10	Cottshayne Hill	Colyton	SY224935	East Devon
11	Edge Hill	Combyne	SY294935	East Devon
12	Spear Coppice	Combyne	SY290925	East Devon
13	Holmsleigh Green	Cotleigh	ST2002	East Devon
14	Ashclyst Forest*	Cullompton	SY002995	East Devon
15	Ashcombe Copse	Dalwood	ST254013	East Devon
16	Linden Park	Dunkeswell	ST154087	East Devon
17	Dunscombe Coppice	Dunscombe	SY162882	East Devon
18	Lincombe	Dunscombe	SY157882	East Devon
19	Pen Point Wood	Honiton	ST134046	East Devon

	Wood Name	Town	Grid Ref	Area
20	Calm Lane/Prison Lane	Newton Poppleford	SY095885	East Devon
21	Littledown Lane Hedge	Newton Poppleford	SY070886	East Devon
22	Offwell Woods	Offwell	SY190994	East Devon
23	Ladram Road Hedge	Otterton	SY096859	East Devon
24	East of Greenlands	Sheldon	ST121097	East Devon
25	Core Hill	Sidmouth	SY123903	East Devon
26	Bucehayes Common	Stockland	ST211048	East Devon
27	Talewater	Talewater	SY081996	East Devon
28	Furze Hill	Uplyme	SY323925	East Devon
29	Furze Hill	Uplyme	SY323924	East Devon
30	Lyme Road Hedge	Uplyme	SY319944	East Devon
31	Rhode Hill	Uplyme	SY334944	East Devon
32	Sleech Wood	Uplyme	SY332933	East Devon
33	Uplyme Pinetum	Uplyme	SS378056	East Devon
34	Uplyme Pinetum	Uplyme	SY316937	East Devon
35	Whitty Hill	Uplyme	SY333949	East Devon
36	Collinhayne House	Madford	ST150116	E Devon/Blackdowns
1	Ashculme Hill Hedge	Ashculme	ST147149	Mid Devon
2	Chenson Wood	Chenson	SS706097	Mid Devon
3	Homeland Wood	Eggesford	SS695108	Mid Devon
4	Bowerthy Wood	Lapford	SS719091	Mid Devon
5	Newhouse Farm	Morchard Bishop	SS762075	Mid Devon
6	Partridge Cross	Templeton	SS885135	Mid Devon
7	Yeoford	Yeoford	SX782985	Mid Devon
8	Batten's Farm	Hemyock	ST159125	Mid Devon/Blackdowns
9	Coppice SE Hurst Farm	Hemyock	ST143113	Mid Devon/ B'downs

	Wood Name	Town	Grid Ref	Area
1	Hartpiece	Burridge	SS574357	North Devon
2	Sloo /Worthygate Wood	Horns Cross	SS374238	North Devon
3	Hedge N of Burcombe Hill	North Molton	SS7329	North Devon
4	Hearson Hill	Swinbridge	SS602295	North Devon
5	NW of Rock Cottage	Umberleigh	SS625164	North Devon
6	Invention Wood	Milltown	SS655477	North Devon
1	Poor Bridge	East Cornworthy	SX839547	South Hams
2	Galpin Street	Modbury	SX662515	South Hams
3	Torrdown Plantation	Modbury	SX702519	South Hams
4	Andrews Wood	Brownston	SX705515	South Hams
5	Moorgate	Ugborough	SX676590	South Hams
1	The Moors	Ashcombe	SX929778	Teignbridge
2	Humber	Bishopsteignton	SX913749	Teignbridge
3	Brinning Copse	Cheriton Bishop	SX833915	Teignbridge
4	Clampitt Plantation	Christow	SX812840	Teignbridge
5	Denbury Down	Denbury	SX816685	Teignbridge
6	Heath Wood	Dunsford	SX815881	Teignbridge
7	Dunsford Wood	Dunsford	SX7988	Teignbridge
8	Stover Country Park	Newton Abbot	SX832753	Teignbridge
1	Fishleigh Barton	Atherington	SS581246	Torridge
2	Coham Woods	Black Torrington	SS463059	Torridge
3	Weekpark Plantation	Chilla	SS433038	Torridge
4	Kennerland Farm	Clovelly	SS330220	Torridge
5	Worthygate Wood	East of Bideford	SS359237	Torridge
6	Penleave Wood	Great Torrington	SS475190	Torridge
7	Hendon Moor	Hartland	SS266190	Torridge
8	Hendon Moor	Hartland	SS267185	Torridge
9	Lutsford Wood	Lutsford	SS258196	Torridge
10	Sanctuary	Newton St. Petrock	SS421109	Torridge
11	Along River Carey	Peter's Finger	SX365886	Torridge
12	Henafor Wood	Welcombe	SS252183	Torridge

	Wood Name	Town	Grid Ref	Area
13	Dunsdon NNR	Dunsdon	SS297080	Torridge
1	Slew Wood	Broadwoodwidge	SX419900	West Devon
2	North of Ellmead	Folly Gate	SX572970	West Devon
3	Lydford	Lydford	SX5185	West Devon
4	Barton Copse	Spreyton	SX700964	West Devon
5	Blackland Copse	Spreyton	SX680980	West Devon
6	Spreyton Barton	Spreyton	SX697967	West Devon
7	Spreyton Barton	Spreyton	SX697967	West Devon
8	Elford Town Farm	Yelverton	SX5267	West Devon

If you can help out on any of these sites (or check other unlisted new sites or otherwise get involved, please contact

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