

# Derbyshire Mammal Group News

Summer 2012

**(Issue 19)** 

# Forthcoming Events:

Saturday 1 September Autumn Social Likely to be a skittles evening at Alfreton Contact Steve or Liz Lonsdale

Saturday 20 October Wild Boar and Deer in the Forest of Dean. A day looking for tracks/signs of wild boar and deer, and for the animals themselves! Contact: Jo Bissell

November (Date TBA) Mammal Bone Workshop Wardlow Village Hall. Contact: Derek Whiteley

Sunday 11 November Mammal Society Regional Seminar, near Edinburgh See below for more details.

Sunday 18 November Coppicing at Calke

Help with Woodland Management at Calke Abbey.

Contact: Jo Bissell

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## An Environmental Officer's Tale

We received an enquiry from Dan Edwards regarding Harvest Mice re-introductions as he had some mice. I contacted Dan as we were curious as to where the Harvest Mice had been found.

Dan had been an environmental officer in the army and now does 'pest control' as a side-line. He had a call from a lady in Lincoln who had 'mice' in her garage. When he investigated he found no signs (no droppings or grease marks on walls) so he set a trap. On checking it the next day the animal he had caught had a white belly and orange/chestnut back. He identified it as a male Harvest Mouse and essentially harmless, but the lady didn't want it to stay so he took it home. Over the next two months he trapped a further male and three females, all of which he took home. Inevitably the mice began breeding. Dan has kept a record of the breeding and to avoid in-breeding acquired two separate males to increase the genetic variation.

He sets up the tanks with branches, teasels and grasses which the mice use quite happily. Tennis balls were introduced to provide a safe haven. Dan makes a small hole in the ball which the mice gnaw to a suitable size.

Dan has recorded the following observations:

After mating the female makes a nest about 4 inches (10cm) round. This is used for the birth and for about three days after, then she moves the young to another home. They emerge after 14 days (Dan says this is consistent to the day) and are being weaned. After 3-4 weeks the young are fully independent.

They have a hierarchy which is prominent in females – if there are three females the 'lowest' female will be picked on by the other two.

They are active by day and guite inquisitive. If anything new gets introduced or anything is changed in their tanks they will immediately investigate.

Dan has given two male Harvest Mice (Roger and Malcolm) to Jo Bissell & Ian Wildbur. The Harvest Mice have been on tour at several events and have been the centre of much interest with the public.

Liz Lonsdale

#### DMG On Tour

Through the wettest months of this year DMG has been roving the county with the stand - and now the Harvest Mice too.

It started with the 20<sup>th</sup> Anniversary of Carsington Water:



Followed by Brackenfield Well Dressings:



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#### Then on to the Woodside BioBlitz:

Woodside BioBlitz had a target of 500 species over the 24hr period. It has been confirmed that 522 species were actually recorded. The Woodside BioBlitz was one of the 100+ accredited events which form the "Meet the Species" project, which is part of 'Discovering Places', the London 2012 Cultural Olympiad Campaign to inspire the UK to discover their local environment. The Woodside Records have now been sent to the Meet the Species coordinators and hopefully they will be able to tick some more species off the list of 2012 species compiled for the project. More details can be found using the following link: http://www.bnhc.org.uk/home/meet-the-species.html



# Closely followed by the Avenue BioBlitz:

We carried out a session of small mammal trapping as part of the Avenue Bioblitz, which resulted in Wood Mouse, Bank Vole, and Common Shrew being caught. Signs of Rabbit, Fox, Field Vole, and Water Vole were also recorded.



#### And finally some dry weather for Nightworld at Rosliston:

We again carried out a small mammal survey, catching Field Vole, Bank Vole, Common Shrew and Wood Mouse (see Liz's article below).



Not exactly rushed off our feet at some of these events, but the weather certainly didn't help encourage the masses to venture outdoors.

So thank-you to everyone who invited us to their event, and to those who helped out at the events

Jo Bissell

# You Can't Plan It ...

In order to add some interest to our presence at the Nightworld event at Rosliston, Steve and I set some small mammal traps. The garden area was suggested by Kate Allies. This was an area with several small gardens within it – a mosaic garden, an area for creepy crawlies, a small pond etc. Apart from some Field Vole signs, we did not find much evidence of small mammals so placed the 50 traps more in hope than expectation.

To limit the number of people we could accommodate whilst checking the traps, we asked that people booked beforehand. The places were filled quite quickly.

At about 20:45 we led the group to the garden and gave them a brief explanation about the trapping and our expectation that we would only catch a few animals, maybe about 10% of traps would be full.

The first six traps were checked and we started with a Wood Mouse, which was duly passed around in a plastic 'pet' box, so all the group could have a close look. The next group of traps produced a Common Shrew. The traps around the pergola produced a pregnant Bank Vole. The final set of traps in the grassy area near the pond gave us a juvenile and an adult Field Vole.

So we had 4 different species to show the group and 5 animals in total (10%) - we couldn't have wished for a better result.

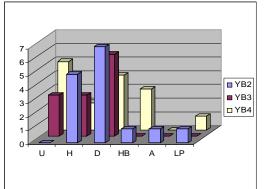
Liz Lonsdale

# A Mystery Solved?

Remote surveillance camera technology casts new light on an old riddle concerning fallow buck behaviour

Remote surveillance motion activated (RSMA) camera technology was used to record fallow

deer behaviour 24/7 on a rutting stand in south Devon, during the autumn of 2009. The RSMA camera was positioned overlooking a 'traditional' i.e. long established fallow buck rutting pit located alongside a 6m high conifer on a private nature reserve abutting Plym Woods, on the northern boundary of the city of Plymouth. The camera was run continuously for a period of 8 weeks, between 7



September and 31
October, a period of
54 days. For a
significant amount
of time in
September the
stand (rutting

territory) was dominated by a single master buck so visits by other less dominant bucks were largely restricted to times when the master buck was not present. However, this did not apply in all cases. There are a number of mainly anecdotal reports in the deer literature describing master bucks being accompanied on their rutting stands by juvenile animals, seemingly

without eliciting any aggressive behaviour from the older animal. Examination of the young buck (YB) behavioural profiles in the accompanying histogram reveals an important clue to what may underlie this phenomenon. Note, the behaviours performed by the different bucks are



explained in the accompanying Table. The age-category abbreviations refer to the following definitions: Young Buck 2 (2<sup>nd</sup> head, estimated 3-4 years

old), Young Buck 3 ((3<sup>rd</sup> head, estimated 4-5 years old) and Young Buck 4 (4<sup>th</sup> head, estimated 5-6 years old).

Whilst at the pit, 33% of YB4 time was spent in head raised (giving scent) behaviour, compared to 25% for YB3s and 0% for YB2s. In contrast, 47% of YB2 time was



spent taking scent (head down), compared to 50% in YB3 and just 27% in the YB4 group. This lack of active scent marking behaviour on the part of the youngest cohort reflects a lack of sexual maturity in these young animals, and it is undoubtedly their physiological neutral state that confers olfactory invisibility and thus immunity from aggression – an immunity, by the way, which also extends down to prickets and male fawns. Further supporting evidence for this tolerance by master bucks comes from the day-time herd records which showed an ongoing presence of YB2s in the herd at times when all older bucks were absent; especially during the late September peak in rutting activity).

The three images show a young (YB2) animal first approaching and then attempting to spar with a seemingly indifferent master buck, which at the time was deeply engaged in lying-down pit behaviour at the peak of the 2009 rut.

#### Abbreviations:

U: Head Up

H: Head Horizontal

D: Head Down, investigation pit base

A: Anointing flank with saliva and gland secretion

LP: Lying in pit

David R Dixon, DMG Plymouth Branch

Contact email address: drdixon1@btinternet.com

# Mammal Society Regional Seminar, near Edinburgh - 11th November 2012

The Mammal Society works with local mammal groups to arrange regional events that bring people together across the British Isles to hear the latest on mammal research in the region.

The 2012 seminar, at Newbattle Abbey College, Dalkeith, has been organised in association with the <u>Lothian & Borders group</u>. Talks include badger persecution, red squirrels and the pox virus, pine martens and issues arising from their recovery, and more! <u>See more event information here.</u>

Only £25 for members, £30 otherwise, and £20 for full time students.

# Leeches - A New Mammal Survey Technique?

It has been found that leeches store blood from their most recent meal for several months. Tom Gilbert of the University of Copenhagen in Denmark fed goat blood to leeches in the lab, and found that some of the goat DNA remained detectable in the leeches for more than four months.

Next his team collected 25 leeches from a remote tropical forest in Vietnam. On analysis, four leeches yielded DNA from a rare striped rabbit, one from a rare Muntjac, six from a rare badger, and three from a rare goat. The team says the rabbit's presence in the sampled area has been suspected since 1996, but 2000 nights of camera surveillance could not confirm it. The badger and goat DNA is the first confirmation that they live in the area. Gilbert says that at \$5 to \$10 per sample, the method is cheap – and as a bonus, the leeches do not have to be searched for, as they come and find you.

(Reported in New Scientist, 28 April 2012,

from Current Biology, DOI: 10.1016/j.cub.2012.02.058)

# Derbyshire Mammal Atlas

The DMG Atlas is progressing. The vast majority of the text is now complete; the next stages are completion of the layout and proofreading. Negotiation with printers will then allow us to announce the publication date.

#### White Shrew

Following the sudden death of our elderly cat we acquired an approximately one year old rescue male. All young cats want to practice their hunting skills and several Field and Bank voles appeared in the house. We cleared the area around the bird table and kept him in at night in the hope of reducing the slaughter. (Lots of wet weather helps).

On the 4<sup>th</sup> May 2012 I saw something on the hall floor; this turned out to be a white shrew. On checking the measurements and dentition it looks like a Pygmy Shrew (Sorex minutus). The dictionary definition of albino is an animal with white skin and hair and pink eyes due to lack of colouring matter. So the shrew in my freezer is an albino.



Looking on the internet many species of shrew around



the world have examples of albinos. To be an albino both parents must carry the gene, but not all the offspring will be albino even if they carry the gene and can pass it on to their young.

There are records of albino shrews from around the country but they are probably under-recorded because they must be easily predated and not all will be delivered via the cat flap to the living room.

**Shirley Cross** 

# Tube Traps - A New Longworth Trap?

Simon Poulton, of BioEcoSS, has designed and is now selling an innovative small mammal live trap.

The traps are made of robust plastic, and all parts except the treadle and door are in a separate compartment to which any trapped animal has no access. The trap is circular in cross-section, which gives it strength, and the smooth sides with no corners or protruding areas should reduce damage due to gnawing.

The nestbox is double-walled, providing insulation, which should retain heat in winter and reduce over-heating in summer. Condensation should also be reduced.

The treadle trip mechanism can be set to a minimum setting of 3g, which should increase catch rates of pygmy shrews (as well as slugs!).



The traps are brown and green, and so are much less obvious in the field compared to Longworth traps; however, a fluorescent door means it can be seen when being searched for, even at night.

All parts snap-fit together, allowing easy assembly and replacement of damaged parts – even in the field.

On the bottom of the trap is a transparent nameplate holder, allowing name and address / researcher's details to be displayed.

The traps cost around £16+vat (depending on the number purchased) – considerably cheaper than Longworth's (now at around £55 new).

A carry-case to hold 10 traps is also available (see lower picture).

Liz and I have purchased 10 and will be using them alongside Longworths in the next few months to gauge their effectiveness.

BioEcoSS can be contacted at <a href="mailto:sales@bioecoss.co.uk">sales@bioecoss.co.uk</a>, tel: 01603 767891, mob: 07968 063963.

Steve Lonsdale



# Mammals on Roads Survey

The People's Trust for Endangered Species is again running their 'Mammals on Roads' survey through to the end of September this year. The survey entails recording presence of live or dead mammals seen while driving along 20-mile stretches of single-track carriageway within the UK. The survey and survey forms are straight-forward, and can be downloaded from:

www.ptes.org/mor

Steve Lonsdale

The next edition of this newsletter is planned for Autumn 2012. Please forward any articles (on any mammal or DMG related subject) to Steve Lonsdale (Lons57@gmail.com).

Opinions expressed in this Newsletter are those of the individual authors, and may not represent the views of Derbyshire Mammal Group.

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