Issue 4
Autumn / Winter 2016

# Newsletter

## Welcome to the fourth issue of the Surrey Dormouse Group Newsletter!

We hope you've had a good year of box checks, and have seen plenty of dormice. It's time to hang up your dusters for the winter, and settle in by the fire with something good to read. What better reading material could you have than the latest SDG newsletter?

This issue has a particular focus on research, with reports from the National Dormouse Conference, Dave Williams' fur-clipping work, and the State of Britain's Dormice Report, along with Ben Kite's talk on historical ecology.

### In this issue:



# National Dormouse Conference

*SDG members at the conference (photo courtesy of PTES)*

***Kathryn Killner reports on the highlights from this year's gathering***

The National Dormouse Conference took place at the University of Reading in September this year. It was good to see quite a number of our members there, either for one or both of the two days.

We started both days with feedback from a very interesting study from Flanders, where dormice have been tagged and radio-collared, giving us loads of new information to digest.

We learned that dormice can have more than one litter a year, sometimes even 3, and it is now known that dormice born early one year can breed later on in that same year.

Tracking has proved that dormice do come down to the ground and cross roads much more often that has been thought previously - going backwards and forwards across a number of roads in one night. One dormouse had even moved 2km down a railway track.

Dormice were found to move around between nest sites night after night, sometimes using old birds nests and squirrel dreys, high up in the canopy, low down in scrub or in holes in trees.

Next we heard about a study using trail cameras to detect dormice to see whether this is something that can be developed to determine presence - still very much in discussion.

We heard from the Essex & Suffolk Dormouse Group, the Partnership for Biodiversity in Planning and from Hampshire County Council, with case studies looking at linking woodland areas in the context of planning. This led on to presentations about the PTES site on the Isle of Wight, dormice on roadside verges and black dormice in Germany. It appears most of us at SDG need some instruction in finding natural nests; they seem to be a lot easier to find across Northern Europe than they are in Surrey!

And that was just day one…

Day two gave us more information on continental dormice, some living in beech forest and even some found in a grazed area 2000m high up in the Italian Alps!

We then heard from Ben Kite with his historical ecology case studies (see page 5), followed by presentations on the National Forest inventory, forest management schemes and some genetic studies, showing distinct genetic groups in different parts of the UK, as well as the latest news from the dormouse reintroduction programme.

All in all we had a fun and interesting two days - here's to next year… in Belgium…!

# Fur clipping dormice

***Dormice can move around woods and change weight substantially between box checks, so unless a mouse has distinguishing features it can be impossible to tell whether one you find this month is the same one you found last month. Dave Williams shares his experience of one way around this problem.***

Fur clipping is a very basic way of identifying dormice that have been found whilst monitoring under the NDMP. This method has been used on other small mammals and allows you to identify individuals for a short time.

*Fur clipped dormouse (courtesy of Dave Williams)*

Before you can undertake fur clipping on dormice, you need to be issued with a Natural England fur clipping licence described as level 2 capture and mark. To obtain the licence you must undergo training with a licensed fur clipper, who can then supply a reference when you are considered competent.

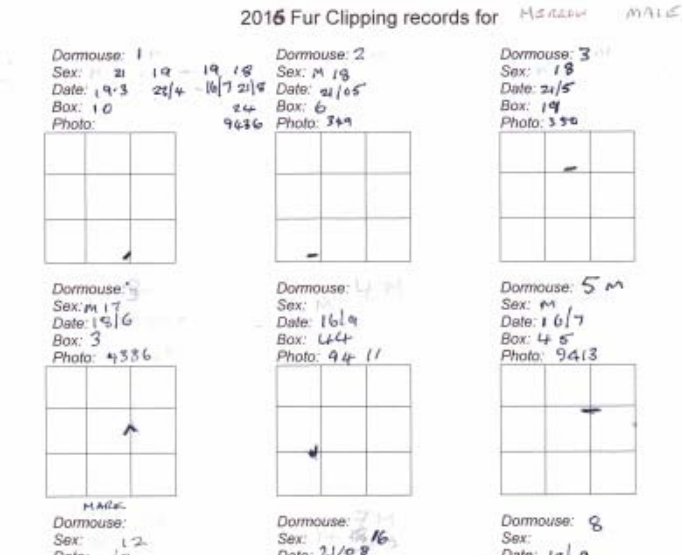
Fur clipping is a low cost method, as all you need is a pair of small sharp scissors, and of course methods of recording the positions of your clips. I use a chart pictured below, one for males and one for females. I also take a photo and record the photo number on the form. You can then match them up later when you analyse your data.

I usually fur clip all adults, unless it's a female with very young greys or pinks, then I feel the stress and time taken away from her young is too much of a risk. When you have made clips on all parts around the body you then may have to give it two small clips.

The underfur of the dormouse is black with just a golden tip, so it only needs a shallow cut to show up. It can take some getting used to, and you must feel competent and confident of holding the dormouse securely without damaging it, and in your left hand (if you are right handed) as you need to use your right hand to use the scissors for clipping. Always ensure that your hands are inside the large bag, unless the dormouse is in deep torpor.

Fur clipping can give you a better indication of the actual number of dormice found in a season. It can show how some of them move from box to box throughout the site. You can see increases or decreases in weight. We have also confirmed that dormice turn up in nests previously occupied by other dormice. Sometimes a dormouse will not be found in a box for several months, and then return to the same box, or a different one. The problem is the fur regrows and you then have to start again each season.

SDG have two members with fur clipping licences, with one more now trained, who will apply for a licence for next season.



2016 Fur Clipping records for

Dormouse: 1
Sex: 21 19 19 18
Date: 19·3 22/4 16/7 21/8
Box: 10 24
Photo: 9436

Dormouse: 2
Sex: M 18
Date: 21/05
Box: 6
Photo: 349

Dormouse: 3
Sex: 18
Date: 21/5
Box: 19
Photo: 356

Dormouse: 3
Sex: M 17
Date: 18/6
Box: 3
Photo: 4336

Dormouse:
Sex:
Date: 16/9
Box: 44
Photo: 94 11

Dormouse: 5 M
Sex: M
Date: 16/7
Box: 4 5
Photo: 9413

MALE

Dormouse:
Sex: 12

Dormouse:
Sex: 16

Dormouse: 8
Sex:

*Fur clipping a dormouse (photo by Graham Saxby)*

# Site profile: Box Hill

***With around 850,000 visitors each year, and featuring in literature, sport and music, Box Hill is perhaps the most famous of all our sites. Mary Stuart-Jones and Pip Wood introduce us to SDG's newest site.***

Our friend and colleague, Alison Johnson had for some time been liaising with the National Trust to set up a monitoring site at Box Hill before she left the county in 2015. Typically, she returned to discuss preparations and to help install the boxes in February 2016.

The National Trust had organised the making of 100 good quality boxes by their volunteers and the area ranger, David Benjamins, had asked SDG to help him observe and acquire the skills in order to earn his own dormouse handling licence.

*The team who installed the boxes: Mary and Rob Stuart Jones, Pip Wood, Alison Johnson, Dave Williams, Gina, David Benjamins and Sam (National Trust rangers)*

Site 1 covers nearly 1.5 hectares and is in a relatively inaccessible part of the Hill. It does include a newly coppiced hazel enclosure (and some of the country's rarest orchids), surrounded by dead hedging, to keep the deer out. David's team have monitored this regularly to remove sycamore and to encourage bramble and honeysuckle.

SDG's Mary Stuart-Jones and Pip Wood have jointly supervised the monthly recording since April but it was only during this October's box checking that any dormice were actually found – in a box near the coppiced enclosure. Four juveniles, (two males and two females, weighing between 14 - 17g) had made a nest on top of an old bird's nest. Only one assistant NT ranger was accompanying us this month and it was the first time he had seen a dormouse. We were charmed to witness how he was quietly enchanted by the animals – and calmly kept them warm and dark, in their separate bags inside his jacket, while we carried out the measurements. We remembered our own"first times".

*Weighing the first Box Hill dormice*

Box Hill covers 20 hectares and dormice have been seen over the whole area for many years. In November, we will use the remaining 50 boxes to set up a second site.

## Fun Box Hill Facts

- It's named after the box trees that grow on it
- Jane Austen used Box Hill as the setting for a key scene in her novel, Emma
- John Logie Baird, the inventor of the television, lived on Box Hill
- Major Peter Labilliere, an eighteenth century eccentric, was buried head downwards on top of Box Hill, reportedly because he believed the world was topsy turvy
- Box Hill has been owned by the National Trust since 1914

# The state of Britain's dormice

*Annabelle South*

Dormice hit the headlines in September, with the launch of ***The State of Britain's Dormice*** report. The report, launched at the National Dormouse Conference (see page 1), was written by the People's Trust for Endangered Species using data from the National Dormouse Monitoring Programme (NDMP).

The report makes gloomy reading for dormouse fans. The headline finding is that the population has fallen by a third since the end of the 20th century.

Those of us who've attended a dormouse ecology course will know that the range of dormice in Britain has halved in the last hundred years. It's worrying to hear that numbers have continued to decline since the turn of the century.

The PTES analysis compared peak counts of adult dormice in May or June at sites with at least five years of data. It took the year 2000 as the base year. They found a steady decline in counts of dormice from the mid 1990s. Peak counts for the last few years are a third lower than peak counts in 2000. If the rate of decline since 2000 continues to 2025, the dormouse population will have dropped by more than half.

The report identifies a number of factors in the decline of dormice in Britain:

- Habitat loss and fragmentation
- Changes in woodland and hedgerow management
- Climate change and unpredictable weather

The report quotes findings from research by Fiona Sanderson into the effects of weather on dormice. Cold, dry winters boost dormouse numbers. In oak woodland, warm springs and hot summers benefit dormouse populations. In hazel woodlands, cold, dry autumns are better for dormice.

The report points out that dormouse numbers aren't declining in every NDMP site, although the overall trend is downwards. Figure 4 of the report shows a mixed picture for Surrey, with numbers declining in most sites, but rising in others. We'll have a more indepth look at the historical data from Surrey in the next issue of the newsletter.

The report concludes by acknowledging the contribution of the professionals, volunteers and students who have contributed data to the NDMP. The data from our box checks is drawing attention to the plight of dormice in Britain, and suggesting what needs to be done to protect them.

# *Glis glis* box check

*Kathryn Killner*

At the presentation to SDG from Pat Morris in March, we were invited to take part in a *Glis glis*, or edible dormouse, nest box check. At the start of October, a few of us made the journey up to deepest, darkest Hertfordshire and were taken round by Pat and some of his volunteers, helping with weighing and sexing, much like on a hazel dormouse check, except the animals are 10x bigger and with much sharper teeth! We did have a couple of escapees but managed to see a good number of animals at various life stages.

The edible dormouse was accidentally introduced through an escape from a private collection in 1902. As a result, the British edible dormouse population, now at least 30,000 strong, is concentrated mainly around the Chilterns. Like the hazel dormouse, the edible dormouse is nocturnal and spends most of its time in the trees, although it prefers beech to hazel.

Pat Morris and Roger Trout and their teams are carrying out PIT tagging and radio collaring to monitor the population in this particular woodland. PIT tagging enables researchers to identify different individuals, to monitor their growth, movements and breeding. Radio collars are being fixed to dormice of a particular age and weight in order to find out whether they hibernate for longer periods of time if there is no food available, thought to be up to 18 months.

*Glis glis (photo courtesy of Kathryn Killner)*

Thanks to Pat, Roger and their volunteers for a very interesting day out.

# Historical Ecology and Dormice

***At the SDG meeting on 10th November, Ben Kite, Managing Director of Ecological Planning and Research Ltd and SDG founding member, talked about the relationship between historical ecology and the presence of dormice in our woodlands. Julie Mottishaw provides a synopsis.***

We know that dormice require a seasonal succession of food suited to their diet. This is provided by a good biodiverse habitat, which in turn is closely associated with ancient woodland.

Ben took us through four case studies which took the location of a dormouse population and then followed the landscape back in time via old maps to see what the original ecological conditions were and how they had changed over the years. One case looked at a small and isolated piece of woodland, which looked very unlikely to support dormice, but moving back through time via old maps showed it was a relic of ancient woodland, and indeed it does have a dormouse population! It was very interesting to see how areas of ancient woodland were hollowed out to make way for arable farming leaving parts of the woodland as boundaries. Another case looked at Surrey and how the cluster line of dormouse presence matched the way the land had changed over the years, especially as the heathland developed. All this work has led to the following conclusions:

- there is a relationship between the historical ecological make-up of the land and the presence of dormice, this makes this another tool which can be used by ecologists to predict possible dormouse presence when carrying out surveys
- studying the changes to the landscape over time helps us understand the impact on dormouse populations
- and very importantly it also shows how us to help, for instance by improving links between isolated pieces of ancient woodland

## Dormouse teeth

Some years ago a tiny, mummified, juvenile dormouse was found among brown leaves in an old dormouse nest. Derek Smith gently cleaned the skeleton and carefully stabilised the plates of the skull.

His photographs, in addition to demonstrating dormouse size and scale compared with hazel nuts, clearly show the distinctive transverse ridges on teeth in the upper and lower jaw.

*Dormouse skeleton photos showing whole of dormouse (above) and teeth (right), courtesy of Derek Smith*

## SDG events

SDG have attended lots of events this year, educating people about dormice around the county:

- Roar and Explore (June)
- Gatton Country Fair (July)
- Rustic Sunday (July)
- Woking Canal Festival (August)
- Winkworth Arboretum (September)
- Norbury Park Sawmill Open Day (September)

Thanks to all the volunteers who have helped at these events. If you'd like to get involved with any events next year, email: **info@surreydormousegroup.org.uk**

*The SDG stand & team at Roar and Explore (photo by Kathryn Killner)*

# Dormouse Ecology Course

SDG held its annual Dormouse Ecology Course in August. The event was well attended, and those taking part were able to see lots of dormice during the practical session in the afternoon.

# Highlights from around our sites

## Chilworth

The sensitive habitat work carried out by Guildford Borough Council is looking good, the coppiced hazel is growing and the removal of holly revealed a new area of hazel. This has enabled us to install 10 more boxes, making 40 in total. Box checking is famous for its disappointments as well as fantastic finds and I'd like to thank the volunteers who helped at Chilworth for the whole year and kept optimistic despite the results – we'll be back!

## Polesden Lacey

At the start of this year we installed 11 new boxes, bring the total up to 50. We've had better numbers of dormice this year than last year, with only one box check not finding any. The National Trust ranger team for the site recently attended the PTES Woodland Management for Dormice course led by Pat Morris, so we're hopeful that will inspire and inform the work they do in the woods.

## Roughs 2

In June this year we set the boxes up. We haven't found anything so far except the beginnings of a dormouse nest (exciting!) and some wood mice.

*Dormouse escaping up a tree (photo by Kathryn Killner)*

## Useful links

- Surrey Dormouse Group
- Surrey Dormouse Group Facebook group
- PTES training information
- Dormouse monitor
- Wildwood
- British Wildlife Centre

## Contact us

**info@surreydormousegroup.org.uk**

*Woodmouse peeping out of a nest at Roughs 2 (photo by Jess Smith)*

# And finally…

As ever, we'd love to hear what you think of the SDG newsletter, and even better, for you to get involved in the next issue. If you have any photos for the next issue, or would like to write an article, or suggest something we should cover, please email **info@surreydormousegroup.org.uk**

Thanks to everyone who has contributed to this newsletter. We kept our promise from the last issue and had a few more dormice photos, even if they're not all hazel dormice (or alive).