

The Dormouse Monitor

Newsletter of the
National Dormouse Monitoring Programme
April 2001

An uncertain start to this year's work

Thank you to everyone who took part in the monitoring programme last year. All the data you collect are invaluable additions to the huge dataset that has been put together over the last few years. In addition to the work she wrote about in the last edition of *The Dormouse Monitor*, Fiona Sanderson is also setting about the task of analysing the dataset to see what lessons can be learnt for the future and if, and how, woodland management can be improved to benefit dormice. It had not been possible to do this before for several reasons. Firstly, all the available data hadn't been collated and entered onto the computer. Secondly, and quite simply, it's a very time consuming process analysing a large dataset and neither Pat Morris nor Paul Bright had been able to find time in their busy schedules to do so. There is likely to be a lot of useful information locked away in the data we've all worked so hard to collect. PTES is, therefore, providing funding to allow Fiona to carry out this essential work over the next three years.

The Dormouse Re-introduction Programme will continue this year with re-introductions in two counties, Cambridgeshire (where the first re-introduction was made in 1993) and Worcestershire. Suitable sites have been located and, at the time of writing, local teams are being assembled to help with the practical work on site. This year, for the first time, PTES will be organising the releases and co-ordinating all the activities, working at all times under the expert direction of Paul and his team. PTES and English Nature will be jointly funding the work.

After many years of sterling work Pat and Mary Morris have now decided to take a back seat as far as everyday activities go. Pat will still be keeping a watching brief and giving everyone the benefit of his unique experience!

This newsletter is intended as a two-way vehicle for communication. Please keep your questions coming and we will print a selection of them next time, together with



answers from the experts. If you have any news you would like included that you think would be of interest to others, please let us know. Also, we would like to receive articles from individual surveyors about the sites they monitor and their experiences while out in the field. Please may we have all contributions by the end of August 2001.

Finally, if you know anyone who you think might like to receive a copy of *The Dormouse Monitor* and who doesn't currently receive it, let us know and we will make sure they are on the circulation list for next time.

Foot and Mouth Disease

At the time of writing (end April) restrictions are in place across the country to control the spread of this disease. These have resulted in the closure of many public rights of way, all NNRs, some local Wildlife Trust reserves and many other areas. The situation may be clearer by the time the nestbox checks begin in earnest in May, but do please check with the managers of the wood that you monitor. On no account should you visit any sites against the advice or wishes of the owners or managers. You may also find it helpful to seek up-to-date advice from your local English Nature or Wildlife Trust office.

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The National Dormouse Monitoring Programme is funded by English Nature and the People's Trust for Endangered Species. The scientific work is based at Royal Holloway, University of London, Egham, Surrey TW20 0EX and the organisation is carried out by PTES. *The Dormouse Monitor* is compiled by Valerie Keeble & Susan Sharafi.

Information on recording in 2001

We are enclosing this year's recording forms with this spring edition of *The Dormouse Monitor*. As last year, please do send in all your records for this year by **30th November** using the enclosed stamped addressed envelope. It's very important to get all the forms back to us in good time, so that Paul Bright and Fiona Sanderson can analyse all the data in time for us to report back to you all as fully as possible next spring.

As the programme has developed, a lot of thought has gone into revising the recording forms each year. You will note that this year, for example, we have asked for the start time that you begin the check but **it is no longer necessary to record the temperature at the beginning of each check**. This is because we can now get the data directly from the Met. Office rather than troubling you.

So please, before you go out on your box checks, take a few minutes to read the recording forms and survey guidelines thoroughly. When you have checked each box, make sure you have completed the relevant parts of the form before moving on to the next box. If you do not, vital details will be lost. After all, if we disturb the dormouse why not get as much useful information as we possibly can?

Tony Mitchell-Jones, English Nature

Example of a completed recording form

2001

Date (15-25th) 20th July 2001

National Dormouse Monitoring Programme DORMOUSE RECORD FORM



Recorder: A Monitor

Place: Hazel Wood

Total No of boxes checked: 50 Start time: 9am End time: 11am

Box No. Time	No. Dormice (No. or NEST)	Sex (M or F)	Weight (in g)	Torpid or Active (A or T)	Breeding Condition (NB, TS, P, L or PL)	Young (PINK, GREY, EYES OPEN)	Comments
3	1	M	20	A	NB		White tip to tail
9.10							
20	5	F	19	A	L		
9.50		M	9	A	NB	EYES OPEN	
		M	8	A	NB	EYES OPEN	
		F	8	A	NB	EYES OPEN	
		M	8.5	A	NB	EYES OPEN	
29	NEST						
30	NEST						
46	NEST						

Please keep a copy and return your records in October/November to:

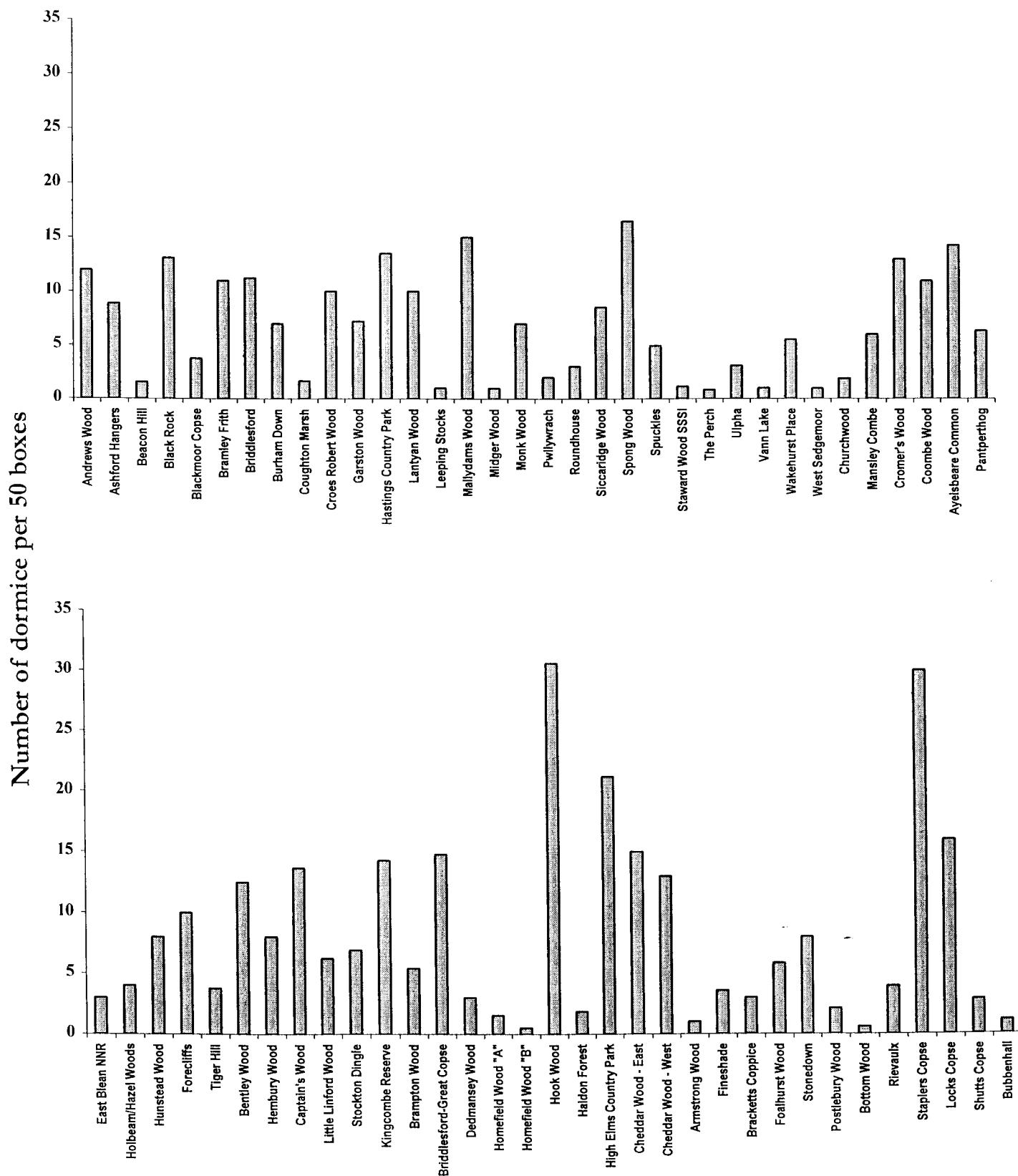
Dr Paul Bright, School of Biological Sciences, Royal Holloway, University of London, Egham, Surrey TW20 0EX (Telephone: 01784 443777)

2000 Records

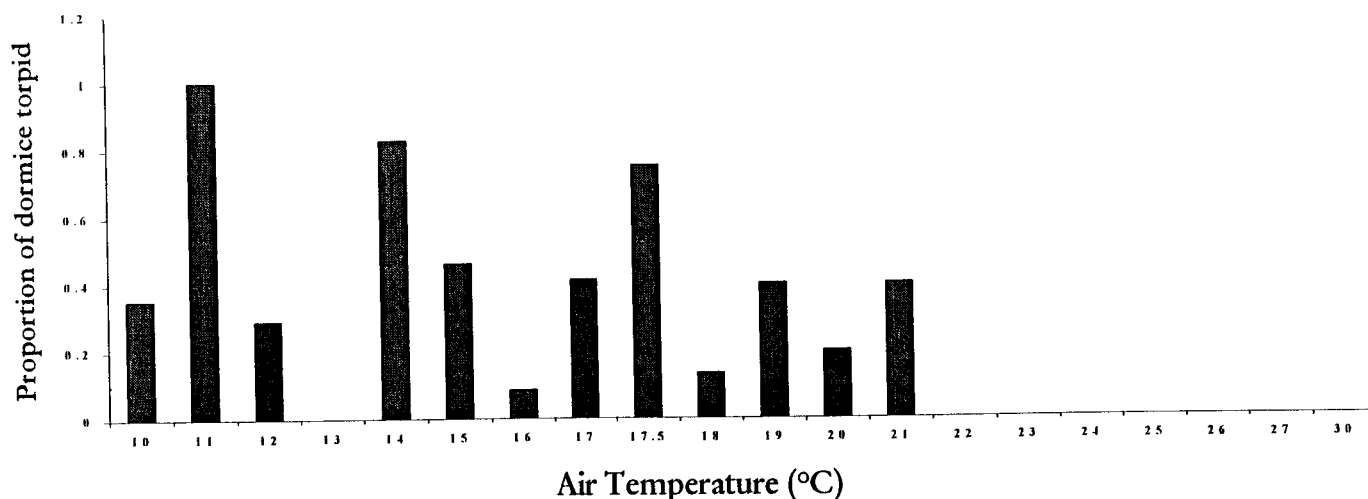
The records for 2000 have now been entered into the database. There were 822 visits to nearly 140 sites and 3879 individual dormice were recorded. This adds up to a huge amount of time and effort that you have spent on monitoring dormice. We thank you enormously for all your sterling work.

The two bar charts on the opposite page show a comparison of how many dormice weighing 7g or more were found at each site in October, expressed as numbers of dormice per 50 boxes. The charts do not include sites where no dormice were recorded. Larkey Valley in Kent is not included as, once again, this site had a very surprisingly high number of dormice (on average more than one dormouse per box) and if included would have distorted the charts.

Number of dormice (7g or over) per 50 boxes in October 2000



Proportion of dormice torpid in June at different temperatures



The above bar chart shows the temperature against the proportion of dormice torpid in June. The 0 values at high temperatures are genuine rather than an artefact of not having any data. Therefore this shows that dormice are not normally in torpor above 22°C.

The Common Dormouse Captive Breeders' Group

At the last but one meeting of the group, which was held in November at the Cloisters in London, Neil Bemment from Paignton Zoo Environmental Park took the chair for the first time. One of the first acts of the meeting was to formally record the group's appreciation of the enormous contribution Pat Morris has personally made to the success of dormouse conservation work since it first began.

The first item on the agenda was to review progress on implementing the dormouse BAP. Tony Mitchell-Jones of English Nature reported that all is on course to achieve the targets it sets. Neil Bemment suggested that a member of the Captive Breeders' Group should, in future, participate in BAP Steering Group meetings and this was formally agreed.

The application to EN for funds to continue the work of the group had been successful and EN will provide £2000 each year for the next three years.

Each member reported on the number of dormice they are likely to have available for re-introductions. Breeding was so successful in 2000 that it will be possible to carry-out two re-introductions this year.

The heaviest dormouse in October 2000 was recorded at Black Rock Drove, Cheddar. It weighed in at a hefty 37g.



Nest of young dormice

Pre-release health screening was discussed at some length. Considerable concern was expressed by some members about the length of time many of these arboreal animals had to spend in small cages while health checks were carried out. The possibility of health screening taking place where the animals were bred rather than at veterinary centres was raised. After discussion it was agreed that, in future, breeders will collect faecal samples from animals nominated for release and send them to the zoo for analysis. Physical health checks and TB testing will be carried out at the breeders' location during the period leading up to the release date.

Dormice in Kent

Prior to 1998 only six woods in Kent were being monitored for dormice under the National Dormouse Monitoring Programme (NDMP). Since then another 27 have been added and it is planned to increase this to 50 by the end of 2002. All future activity will be concentrated on locating further woods that will ensure a balanced geographical spread throughout the county.

This effort has been achieved by the Kent Mammal group (KMG) in close co-operation with private and public landowners through a number of organizations including the Kent Wildlife Trust, English Nature, the National Trust and various Local Authorities.

During the last three years, all full surveys by KMG, in Kent, of mixed deciduous woods over ten hectares in extent, have revealed dormice, or positive signs of them. Indeed one totally isolated, remnant wood of one hectare, produced a number of dormice. Is Kent therefore the flagship county in England for dormice or has it been more extensively surveyed than other counties?

Kent is, however, a county where many changes to the environment are taking place due to pressures from domestic, commercial and farming industries. Visible evidence of woods being bisected or reduced in size can be seen along recently constructed road and rail routes and, until quite recently, hedgerows were being destroyed. The consequence of these actions is that woodlands are becoming increasingly isolated, and, with little chance of dormice moving along natural wildlife corridors, remnant colonies may not be viable.

Plans for dormouse monitoring mean that, eventually over 100 volunteers will have been trained to obtain a dormouse handling licence from English Nature. At present some licensees check more than one wood. This year we hope to train at least 20 more volunteers to fill the gap.

Ken West
Kent Mammal Group

Web Mice

If you have access to the Internet why not visit the dormouse site at <http://www.glrarium.de/dormouse>



Dormouse family

2000 Re-introduction

The dormice re-introduced to Suffolk last year are doing well. On the first nest box check in September, four months after the release, well over double the number of dormice released were recorded!

Recorders Snippets

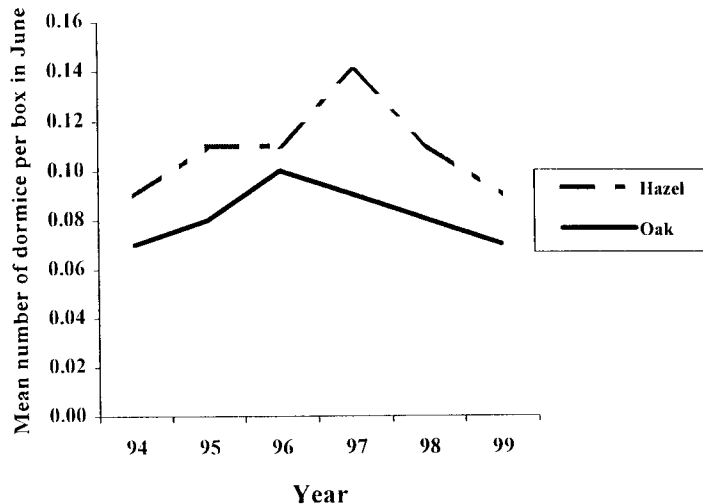
AN ALBINO DORMOUSE AT SICCARIDGE

John and Norma Stevens reported how, when doing the monthly checks on nest boxes at Siccaridge in October 2000, they were already excited at having found one containing a female and 8 active young weighing around 7g each, when they were suddenly presented with a possibly unique experience. Opening another box it was found to contain another lactating female, this time with 6 active young of about the same weight, but one of these was a proper albino, with white fur and pink eyes, possibly female. The following month when checking the boxes again an albino dormouse was found in a box some 80m away from the previous one. It was presumably the same animal, this time definitely identified as a female and weighing 15g, so she had put on about 8g in four weeks. To date nobody else seems recently to have seen an albino dormouse in the UK – have you? If so, let us know.

Habitat, weather and dormouse populations

As I mentioned in the last issue of *The Dormouse Monitor*, I spent last summer carrying out vegetation and habitat surveys on some of our more long-running sites with a view to answering the following questions:

What drives dormouse population dynamics – births and deaths – and causes populations to increase or decline?



Are the factors affecting populations the same at all sites?

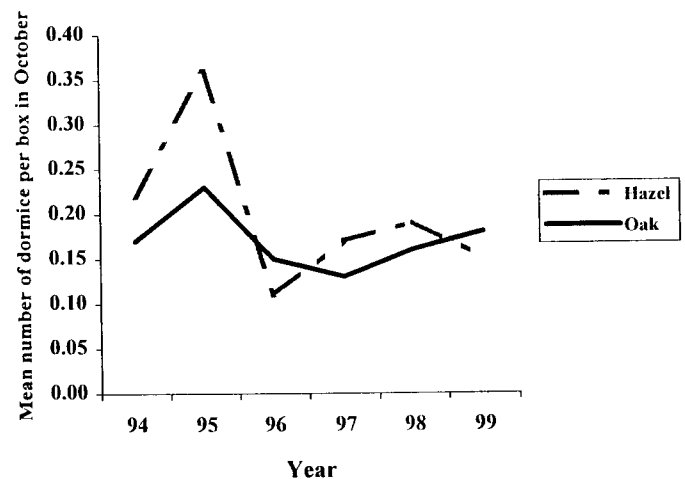
The subsequent analysis, carried out on 16 sites that have been monitored for five years or more, answers some of these questions. I looked at the numbers of juveniles in June and October, and the total numbers of dormice – juveniles and adults – at these times. I examined the type of habitat at the site and the temperature over the dormouse breeding season for each year that data were available.

Habitat data, namely the proportion of oak and hazel in the canopy or understorey, and the canopy cover, allowed us to separate the sites into two types: “oak” and “hazel”. Previous research suggests that oak sites, with many oak flowers and other early-flowering species in the canopy, provide an early food peak as well as a late one in autumn (consisting of hazelnuts and bramble fruits). Hazel sites have less of a canopy layer, which provides less food at that level, but allows hazel shrubs in the understorey to fruit heavily, providing one large food peak in the autumn. We suspected that these food peaks would affect the timing of breeding, and that this would mean dormice would be sensitive to poor weather at different times at different types of sites.

This was borne out by the analysis. Computer-based statistical techniques allowed the consideration of a number

of factors. The results showed that dormouse populations at oak sites in June are larger (and have a greater proportion of last year's juveniles) if the previous year's June to September temperatures were high. At hazel sites, June to September temperatures have no effect, but populations (and numbers of juveniles) are larger if the previous year's September temperatures were low. This may be because low September temperatures are associated with clear skies, and dormice do not like to forage in the rain. Dormice seem to go into torpor more readily in mid-summer rather than in autumn, and the analysis suggests that this would reduce successful breeding opportunities at oak sites. Conversely, rainy Septembers would reduce successful breeding at hazel sites, reducing foraging and hence breeding opportunities for females and not allowing any juveniles born to fatten up sufficiently before hibernation.

The analysis also suggests that populations are regulated in different ways – that is, at different points in the annual cycle – at the different types of site, but more research is needed to be sure of this.



This analysis provides basic understanding of how and why dormouse populations change in size. It can also help to identify which dormouse populations are most likely to persist in the future under changing climatic conditions. I am currently working on analysis of different management regimes at the different site types to see how they affect populations. I also plan to carry out population modelling which will allow me to predict which populations are likely to persist into the longer-term. This will help us find out what is the most appropriate management to ensure that as many dormice as possible are with us for a very long time to come.

Fiona Sanderson
Royal Holloway

Dormice and hedgerows

In the 19th century dormice appear to have been commonly encountered in hedgerows. This does not seem to be the case today. The question is whether this is because dormice have declined or because dormice were more likely to be found in the past, when hedgerows were cut by hand. We are about to complete fieldwork (foot and mouth disease permitting) on a major project – supported by People's Trust for Endangered Species, English Nature and Center Parcs – designed to help answer this question and promote the conservation of dormice in hedgerows.

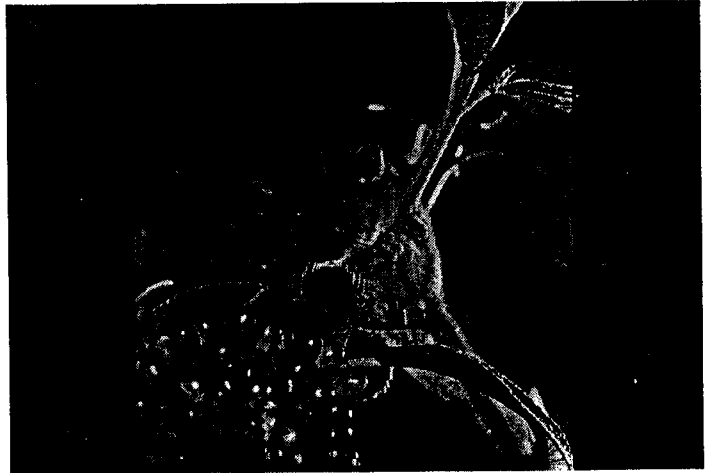
We have resurveyed sites where dormice were found in hedgerows during The Mammal Society dormouse survey, run between 1975 and 1979. Nearly 70 sites were visited, spread widely throughout southern England. We found no evidence of dormice at 65% of sites, suggesting a dramatic decline in numbers in hedgerows. Loss of dormice was strongly associated with hedgerows being heavily cut.

We have also been surveying 100km of hedgerows in Kent, Sussex, Somerset, Devon and Carmarthenshire to find out just what conditions dormice need. This has been a huge task much aided by numerous volunteers, to whom many thanks. Gratifyingly, the results of our labours are very clear. Dormice were found mostly in larger hedgerows, those four or more metres wide. Such hedgerows are highly productive of dormouse foods and provide plenty of cover. Dormice also occurred mostly in more diverse hedgerows; in fact the presence of dormice is a good indicator that a hedgerow is several hundred years old. Diverse hedgerows are more likely to provide a continuous supply of food. Hedgerows nearer to ancient woodland, where larger dormouse populations often reside, were also more likely to be occupied.

So, dormice need large, diverse hedgerows – at least for year-round occupation. The problem is that most hedgerows do not match up to this simple prescription. Most are flailed every year, removing or preventing the development of fruits and other dormouse foods. Heavily cut hedgerows also provide little cover and our experience suggests that dormice are very skittish and perhaps especially conscious of predators in hedgerows. Clearly we need to reduce the frequency with which

hedgerows are cut, to something like that before the advent of the mechanical flail. This would help lots of other hedgerow wildlife besides dormice and dormice could very usefully be used as an indicator of sustainable hedgerow management.

Dr Paul Bright
Royal Holloway



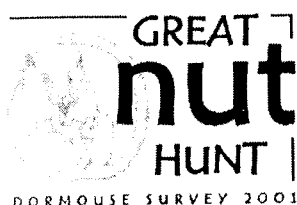
Request for Bodies of Dormice Dead at Monitoring Sites

At the moment very little is known about diseases in dormice. It would therefore be extremely helpful if you would send in any dead dormice you find for post-mortem.

Please telephone Tracy Howard on 020 7449 6685 before sending the body.

The body should be kept refrigerated (but not frozen) before being sent off. Each dormouse should be placed within a separate, securely tied plastic bag. This must then be wrapped with absorbent material such as cotton wool or absorbent paper and placed inside another securely tied plastic bag. Enclose the whole thing in a crush-proof container together with an accompanying note stating where the dormouse was found and when. Then pack it either within a jiffy bag or substantial brown paper parcel. Label the package with **PATHOLOGICAL SPECIMEN, FRAGILE – HANDLE WITH CARE** and the sender's name and address.

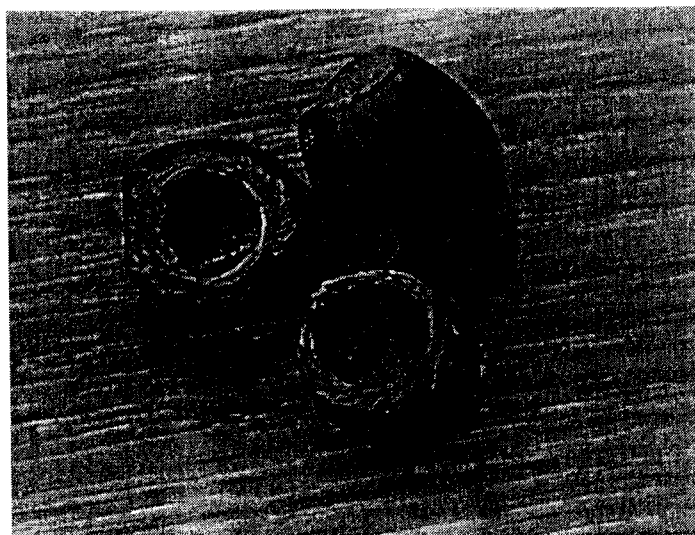
Then send to T. Howard, Dormouse SRP, The Animal Hospital, Institute of Zoology, Regent's Park, London NW1 4RY.



Repeating the Great Nut Hunt in the autumn 2001

This year sees the tenth anniversary of English Nature's Species Recovery Programme. To mark the occasion, the very successful Great Nut Hunt of 1993 will be repeated this autumn (foot and mouth disease permitting). It will be organised by a partnership of several organisations, English Nature, PTES, Center Parcs and Royal Holloway, University of London. As before, we hope to encourage members of the public to send in for the Great Nut Hunt Pack and go out into their local woods this autumn looking for hazel nuts that have been opened by dormice. The Great Nut Hunt is a great opportunity for local dormouse groups to put on profile-raising events such as local surveys or dormouse talks, so we hope this advance notice will give you plenty of time to be prepared. We will include all our dormouse monitors on the mailing list for the survey pack, but do contact PTES if you need any further information. This time we will be taking advantage of modern technology and have a web site (www.greatnuthunt.org.uk) where people can register their interest.

Tony Mitchell-Jones, English Nature



Characteristically gnawed hazel nuts. It takes a dormouse about 20 minutes to open one nut.

It is with sadness that we have to report the tragic death of Mike Miley, a leading light of the Northants Dormouse Group. Mike will be remembered by the many people who attended his talks or training sessions as a great advocate for dormice and nature conservation. He will be greatly missed.

Dormouse Training on offer this year

Training for woodland managers. A course to be organised by PTES

PTES will be organising a training day for woodland managers in September. It will be held at High Elms Country Park near Bromley in Kent. Pat Morris will be the tutor for the day. The course is intended for foresters, woodland managers and conservation officers.

Full details from Susan Sharafi at PTES on 020 7498 4533 or email susan@ptes.org

The Mammal Society Courses

As part of its *Look Out for Mammals* programme, The Mammal Society will be running a number of dormouse training workshops. These courses provide essential skills for budding dormouse workers and include practical sessions on nest box checking as well as lectures on dormouse ecology.

For more information contact Jackie Savery at The Mammal Society on 020 7498 4358 or email enquiries@mammal.org.uk

Both at : 15 Cloisters House, 8 Battersea Park Road, London SW8 4BG.