AUTUMN 2006

The Dormouse Monitor

Newsletter of the National Dormouse Monitoring Programme

NATURAL ENGLAND
Royal Holloway University of London
PEOPLE'S TRUST FOR ENDANGERED SPECIES
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Welcome

The early indications are that 2006 might have been a better year for dormice than 2005. It will be very interesting to know how everyone got on this year. Please don't forget to send in your recording forms. We'll report back on the results in the spring.

Some of you will have already met Ian White, our new Dormouse Officer. Ian has joined us on a part-time basis, with funding assistance from Natural England, to support the reintroduction work. He will build on the good work carried out by Jennie Caddick in the winter of 2004/05. Many of you will remember Jennie who assessed the reintroduction woodlands, mapped the surrounding countryside and identified the relevant landowners. Ian has been appointed to continue this work, ensuring the dormice spread into the wider countryside by improving habitat linkages and working closely with landowners.

We remain ever grateful for all your hard work and look forward to receiving all the results.

Yours sincerely

Jill Nelson
Chief Executive, PTES

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Glis glis numbers booming

As you may well be aware *Glis glis,* or edible dormice, are not native to the UK but were bought here in 1902 by Lord Walter Rothschild. They are found across Mediterranean Europe, from Turkey to northern Spain. Initially Lord Rothschild released a few at his home in Tring Park, though how many and where from is not known. Numbers appear to have risen steadily since then although their distribution remains centred around the Chilterns, within 21 miles of where they were first released. For several years we have been monitoring edible dormice at Hockeridge Wood. This year has been a bumper year for them, in contrast to last year when there were very few animals in the nestboxes.

In May, our first check of the year, we found three animals in the nestboxes. We have never found as many as this so early. In June 75 animals were recorded and in July the number had leapt up to 191. And that was before they had started to breed! In August we carried out the first check to include young. In total we handled 150 adults plus a further 165 babies. 29 of the adults had been tagged, including 19 individuals, who had already been seen earlier in the year, 4 of them twice (in both June and July).

By the September check 128 boxes out of the 140 contained *Glis glis*. 148 animals were weighed – only 3 escaped before they could be weighed and one female was not weighed because she was in the process of giving birth! At least 501 young were counted and weighed in groups. Their average weights ranged from the smallest at 5g to those that were weighed separately at 65-80g each and there were three which averaged 93g.

Paul Barrow

Don Macpherson and other volunteers helping monitor the edible dormice at Hockeridge Wood.

Fewer tagged animals were found this time, only 25, of which 19 were females and 6 males. Looking back at the records of the micro-chipped animals seen this year so far, we've made some interesting observations:

- the oldest animal was a female caught in July, who had been tagged as a juvenile in August 1998 and is therefore at least 8 years old. She is still breeding too. We can see from the database that we have caught her 16 times before so clearly tagging and monthly sampling hasn't done her any harm.
- another, a male found in August who was tagged as a juvenile in Sept 1999, is at least 7 years old.
- several of the tagged animals were found in the same box as they were in when caught and tagged initially and many were in boxes very close to those from which they were tagged.
- there were many recaptures of animals that were not seen last year – so where were they?

Other interesting points based on anecdotal evidence include:

- Several local residents say that they have not been much bothered by *Glis glis* this year, but last year (2005) was very bad. This supports our theory that in years when there is not much food in the wood the *Glis* move out into surrounding areas and invade houses.
- There have been several cases where fully adult, sexually active, males have been found sharing a nest box which is not what you would expect. We shall need to analyse the data to see how often this has been recorded.
- There have also been cases of two females having litters in a shared box, despite the cramped space and there being empty boxes nearby. A number of the litters we recorded in August could clearly be sorted into two age groups.

Pat & Mary Morris


The size of the nest boxes are significanlty larger than the ones used for hazel dormice.

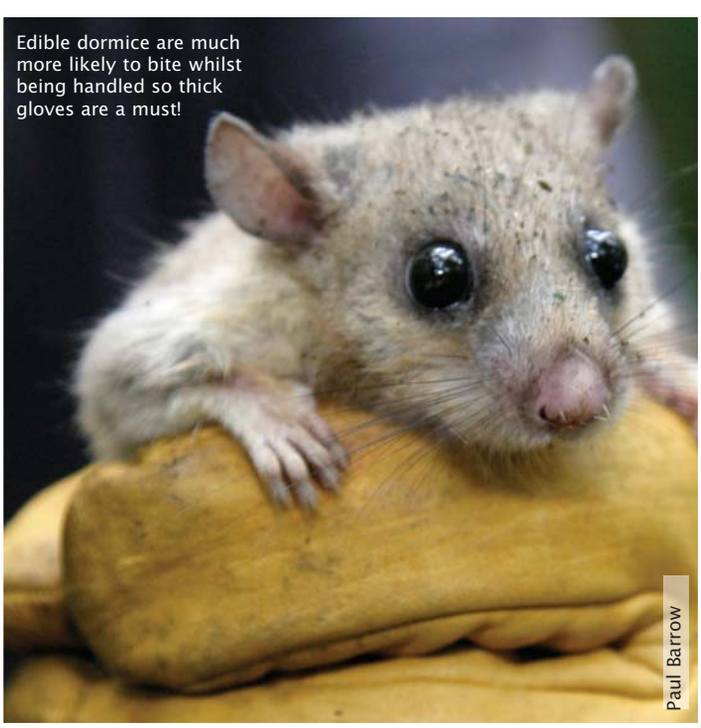
Paul Barrow


The very young *Glis* are pink and blind, growing fur at 2 weeks and opening their eyes at 3 weeks old.

Paul Barrow


Young *Glis* feed not only on their mother's milk but also on a chewed pulp of food she provides from her own mouth.

Paul Barrow


Edible dormice are much more likely to bite whilst being handled so thick gloves are a must!

Paul Barrow

Romanian dormouse update

You may remember that PTES gave my colleagues and I a grant to carry out dormouse monitoring in Romania. We constructed 200 wooden nest boxes and 50 nest tubes (made out of discarded plastic pipes) to monitor five different sites.

The loss of forested areas in the region is the consequence of a long history of logging. The Transylvanian Plain has not had continuous forest cover since the Middle Ages, but has always had small open areas with steppe vegetation. Intensive logging began in the 20th century when the railway was introduced to the area by the Austro-Hungarians and has continued ever since, legally and illegally. The existance of vast agricultural land is rather a consequence and not a cause of the logging industry, and some open areas are actually not cultivated but abandoned, due to the continuous depopulation of rural areas.

We chose five sites that were as as varied as possible in terms of vegetation structure, forest age and degree and exposure of the slope. The nest boxes were placed up in trees, at heights varying between 2 and 3.5m. Over the past two years our nest boxes have been occupied by three dormice species: *Glis glis*, *Muscardinus avellanarius* and *Dryomys nitedula*. The fourth species that is found in Romania, *Eliomys quercinus*, apparently does not occur in our project area and we suspect that earlier references to the species here were identification errors. We also found references claiming that *Eliomys* and *Dryomys* do not occur in the same area, and we found *Dryomys* at all five sites over the past two years. This year we found 420 *Glis*, 42 *Muscardinus* and only 17 *Dryomys*.

Eliana Sevianu

A juvenile *Glis* high up in the canopy.

	Site 1	Site 2	Site 3	Site 4	Site 5
Glis glis	82	42	25	135	12
Muscardinus	1	10	14	10	7
Dryomys	2	0	0	0	15

The low numbers of the two smaller species in our nest boxes could be the result of nest concurrence with the larger *Glis*, but it is also possible that in our study area *Muscardinus* and *Dryomys* are more sensitive to human disturbance (handling) than *Glis*. For example, at sites 2 and 3, we found *Dryomys* individuals in nest boxes last year, but not a single one this year.

The remarkable differences in numbers between sites is, almost certainly, due to differences in vegetation structure. For example, the forest at site 5 consists almost entirely of *Quercus* species, with only a small number of *Cerasium avium* and *Tilia cordata*. The trees were almost all the same age and had virtually no shrub layer, so the only available food source is acorns. This could explain the overall low numbers of dormice, but raises the question of the high number of *Dryomys* found here (the highest of all sites). We recorded several habitat variables at each site and each nest box, and the data will be statistically interpreted to try to define the variables that influence dormice distribution and abundance.

Eliana Sevianu

Bogdan Coldea

An edible dormouse looking down from a tree at Eliana.

Eliana Sevianu

Dormouse reintroduction in Bradfield Woods, Suffolk

This year saw the second reintroduction of captive-bred dormice to Suffolk. Many of you may remember the Victorian Nut Hunt. By using evidence of gnawed hazel nuts we were able to determine whether dormice still survived at sites that they were known to inhabit in the 19th century. Evidence of dormice was found at only 13% of the Victorian sites. In Suffolk recent, reliable records of the species came from the Stour Valley, the woods to the south west of Ipswich and the Suffolk Wildlife Trust's reserve at Bradfield Woods.

Bradfield Woods National Nature Reserve is a working wood that has been under continuous traditional management since 1252, supplying local needs for firewood and hazel products. Having gone through various different management regimes, recent monitoring for dormice in various part of the wood came up with negative results. Following changes to the coppicing regimes, with a much longer cycle and a better variety of age structures within the woodland, it was decided, during a visit earlier this year, that Bradfield Wood should be this year's reintroduction site.

Even though there are 25 known dormice sites in Suffolk, these populations are very isolated with insufficient hedgerow "corridors" to allow the creatures to naturally expand their range. Dr Simone Bullion, from Suffolk Wildlife Trust, said the woodland chosen was considered capable of sustaining a population of dormice. "Our assessment is that although the conditions are right there is little chance of the creatures naturally re-colonising the wood," she said.

Following the release of 38 animals in June, we are hopeful that this reintroduction will be as successful as the previous ones. During the first box check in September volunteers counted 46 animals and found several more nests in boxes throughout the woodland.

Mike Ewart

Mike Ewart

Derek Bryant

A great team of volunteers were on hand to help with the reintroduction in Suffolk this year, putting up cages, carrying nest boxes and feeding the dormice.

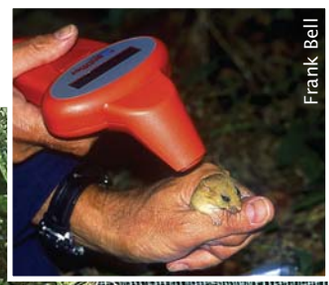
Julian Chapman

Chatsworth Estate release update

Last year we reported the release of captive-bred dormice at Chatsworth House in Derbyshire. Derbyshire is on the edge of the historical range of dormice and so although we were keen to repopulate the county we knew that it would be a challenge. Part of the White Peak, this site is within an area of predominantly limestone hills and dales, and is a gentler and more welcoming landscape than the Dark Peak.

The first checks carried out by Dave Mallon and his team last year were fairly disappointing. Last September a female with two young were the only animals found after checking 204 boxes. In October, although they found several nests, again only one adult dormouse was found - another female who had moved 500m from her release cage.

We did not know what to expect this year. In June Dave found just two animals - one pregnant female was a nice surprise. Then this autumn all the hard work and box checking has paid off. 48 dormice were found which included two huge litters of eight young with their mothers. In all there were several pink and furred babies. We hope that they all have time to feed and fatten up sufficiently to cope with hibernation.

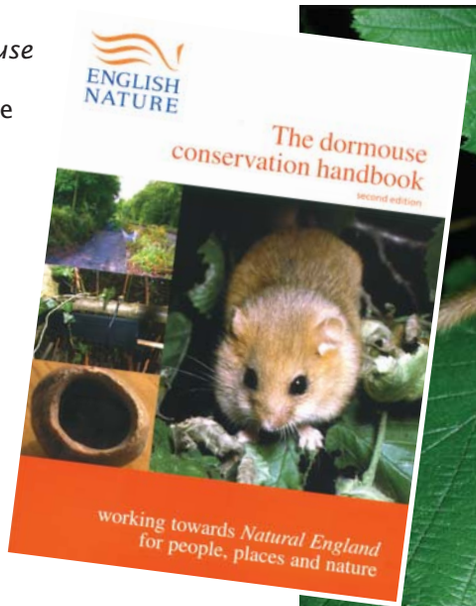

Frank Bell


Dave Mallon has been involved in both Derbyshire reintroductions.

Frank Bell

New *The dormouse conservation handbook*

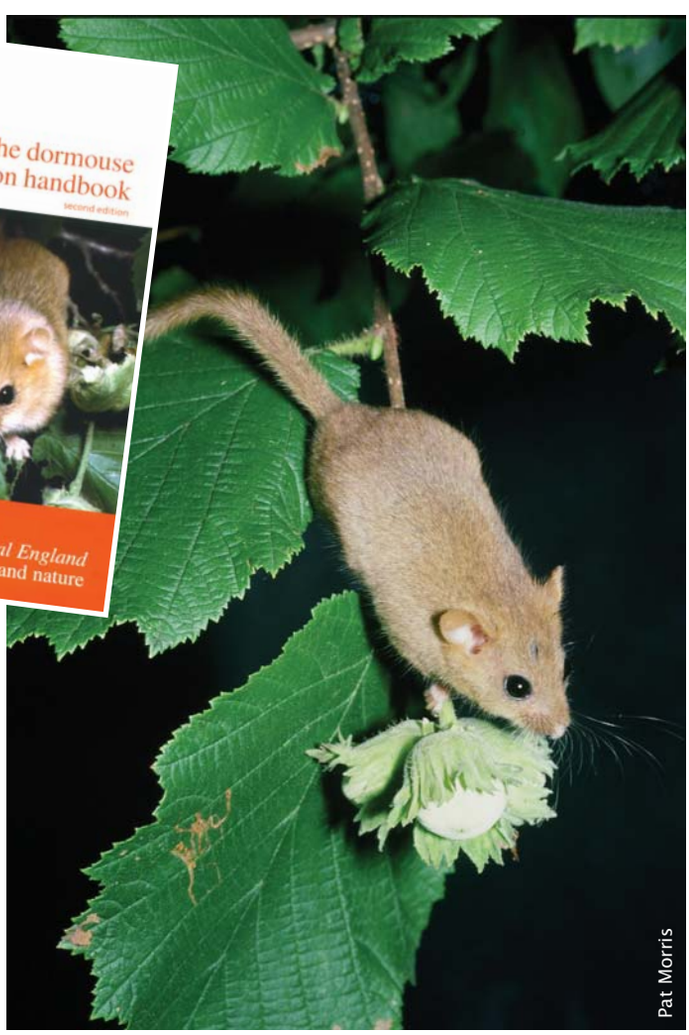
This considerably expanded second edition of *The dormouse conservation handbook* draws together much information on the species that has been gathered since the first edition was published in 1996. In particular, the introduction of a licensing system for European protected species has highlighted the need for guidance on mitigating the impact of development or other operations on dormouse populations.



Mitigation studies are still developing, but we have included, wherever possible, good practice guidance that should help determine appropriate levels of survey and mitigation in a variety of circumstances. Examples of successful mitigation are still relatively rare and we would welcome further case studies as they become available.

The dormouse conservation handbook
Paul Bright, Pat Morris and Tony Mitchell-Jones
73 pages, figs, tabs.
English Nature/ Natural England

Available from Natural England £5


Pat Morris

Dormouse bridge, Somerset

One of the main problems facing dormice today is the fragmentation of their habitat, generally by development and frequently, in this case, by roads. Simple rope bridges may work for squirrels but there is no evidence that dormice use them. Intuitively this is not surprising as such a bridge would appear to be a branch of *Prêt a Manger* for tawny owls! Green bridges, like the one Pat Morris instigated over the new section of the A21, are perfect and the ideal we should all be aiming for. They do have downsides though. They take some time to become usable by dormice – you have to wait for the trees and shrubs to grow – and they are more expensive than many small schemes, such as housing developments, can support. Finding a middle way has been challenging a number of us for some time, so when Channel 4 approached Warren Cresswell and I about making a series of wildlife programmes about the practical things that could be done to make a difference, testing the feasibility of dormouse bridges over roads was close to the top of my list.

The TV company made several preparatory visits to Somerset during which they promised that they would film experiments to look at different diameters and lengths of mesh tubes filled with branches or creepers to see if dormice had a preference. The programme, in the unfortunately titled series "Wild thing I love you", has since been broadcast and anyone who has watched the dormouse one will have seen that no such experiments took place, well not serious ones. Instead they arrived with their own idea of a suitable mesh tube which was then erected over a nearby quarry road. So, while we have not succeeded in doing any experiments in terms of tube size etc., we have got a crossing in place – a mesh tube suspended from two cables with a reasonable amount of vegetation in it - and we are monitoring it to see if we get dormouse use. We know they get right up to the tube on one side from previous work but we have no records on the other. If we can once again get dormice in the woodland on the side where they were found previously then we can tag them so that if we pick them up on the other side we will know that they have crossed the road using the green bridge.

This tubular bridge is balanced on two parallel cables. Other designs feature one cable inside the tube, from which it is suspended.

Pat Morris

Michael Woods

Pat Morris comments, "This is a good start! I think we need some experiments to see whether dormice will use tubular bridges made of mesh because currently the Highways Agency simply suggests a length of rope. This would be too exposed and unstable even in a gentle breeze and I doubt that dormice would use a rope more than about 10m long. We also need to see if a tubular mesh bridge (such as this one) could be narrower in diameter, which would cost less. This bridge is balanced on two parallel cables - it would be interesting to see if it is possible to hang the tube from a single cable running along the inside of the roof (perhaps with a couple of guy ropes out to the side). It would be cheaper and possibly more stable. What is the cheapest and most effective dormouse bridge to span say 20 or 50m, and will they use it?"

The dormouse bridge is suspended well above the road by two telegraph poles.

Pat Morris

Dormouse news

WOODLAND TRAINING COURSE

In October 25 people gathered at the RSPCA Mallydams Wood Wildlife Centre in East Sussex to hear dormouse legend Pat Morris speak on how to manage woods for dormice.

A nest box scheme was setup at Mallydams in the early 1990s, making the wood one of the first in the NDMP and a key site. Richard Thompson, head of the centre, took over monitoring in 1996. Richard explained to the group that the nest boxes had remained in the same positions as suggested by Pat when the monitoring scheme began. At first glance the site does not appear to be the ideal dormice wood. There is quite a bit of shading in the wood and hence little understorey. But this is made up for by the wood's wide diversity of tree and shrub species. Year on year Richard has reported good numbers of dormice. Last year the site was in the top 5 sites throughout the country.

For details of future courses call Susan at PTES on 020 7498 4533 or email susan@ptes.org.

MALVERN MONITORS

In 2000 Ann Bowker wrote to PTES about finding dormice on her bird feeders. Sadly, by the middle of 2004, they were all gone. So she teamed up with Hilary Smith, HAM (Herefordshire Action for Mammals) co-ordinator, to find out how dormice were faring in general across the Malvern Hills.

They chose the best habitat in


Ann Bowker

each of 22 one-kilometre squares. Then in early April around 50 volunteers climbed steep hillsides and waded through bramble and bracken to put up 20 plastic nesting tubes in each. These have now been checked three times.

After a disappointing summer they finally had some good results. Two sites each had one nest, another two sites each had three nests and one site had seven. We look forward to hearing how next year's box checks go at these sites.

DO DORMICE EAT BIRD'S EGGS?

About 80% of the dormouse nest boxes in Ham Street Woods National Nature Reserve (NNR) are taken over by blue tits in the spring. Whilst carrying out the May check Greg Thomson found two very active dormice in a box with a blue tit's nest. Also in the nest was a clutch of broken eggs. About 100m further on there were two more boxes with blue tit nests, each with broken eggs. Had the dormice been eating the eggs?

Whilst looking for evidence of

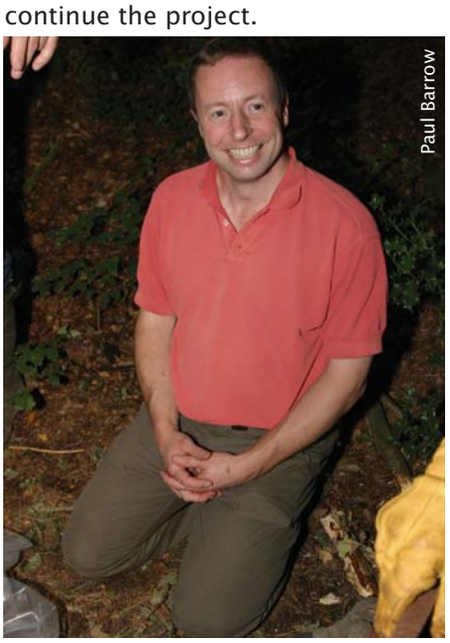

Kate Merry

hazel dormice feeding on birds eggs Greg came across the Animal Diversity Web run by the Museum of Zoology at the University of Michigan. Not only did this website mention the egg eating habit but there is plenty of factual data on the hazel dormouse with references to sources. For more information visit http://animaldiversity.ummz.umich.edu/site/index.html

Please contact us and let us know if you've ever found dormice in nest boxes containing cracked birds' eggs.

NEW PTES DORMOUSE OFFICER

Following on from Jennie Caddick's great start at identifying all the landowners around the reintroduction sites and the nearest suitable locations for dormice to spread out to and colonise, we would like to welcome Ian White, our new dormouse officer to continue the project.


Paul Barrow

SEND IN 2006 RESULTS

If you have any news to report or any questions that you would like answered please write to *The Dormouse Monitor*. We are always interested to hear what you have been up to or anything unusual that you have found.

Please do not forget to send in your results from this year and we'll be in touch again next spring to let you know if 2006 was a good year for dormice.