issue 1 2012

# the dormouse monitor

the newsletter of the national dormouse monitoring programme

people's trust for **endangered species**

## INSIDE

# Welcome

This year has already been a busy one for dormouse conservation. Since we had a record 305 sites monitored in 2011, the data analysis took longer than normal. Also, this year, for the first time, we had the data analysed in such a way that we can look at the May, June, September and October records as individual trends. See page 11 for more information.

We are currently preparing for the 2012 reintroduction at another Warwickshire site. As we go to print, 40 animals are being health screened at Paignton and London Zoos. In just under a month at least 15 pairs of animals will be taken to their new home, and for the first time you will be able to follow the live action on facebook.com/ptes and twitter.com/ptes.

Thank you to all of this edition's contributors. We have updates from dormouse groups all over the country, there is so much going on. We also have interesting articles about dormice crossing various gaps, and dormice using our first real wildlife bridge in Kent.

We do hope you enjoy reading this edition and if you would like to send us an article we would be delighted to feature it.

Best regards

Nida Al Fulaij & Susan Sharafi

# Contents




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# Meldon Woods (AKA Bluebell Woods)

Situated on the northern edge of Dartmoor, to the west of Okehampton, Meldon Woods covers an area of 21.6 hectares. This ancient woodland predominantly consists of western oak with a hazel understorey. The hazel was coppiced on a regular basis to provide thatching spars, hurdle rods and faggots for ovens. Beech and sycamore, whilst not usually associated with western oak woodland, are present, as is ash in the base-rich flushes (often with sycamore). Rowan and holly are occasionally found with alder, willow and the odd elm stands in the riparian zone along the West Okement River.

Little management had been undertaken as a result of an existing covenant which stipulated that 'no trees should be felled' until 2005, when Dartmoor National Park Authority agreed with the Parish Council to undertake some small-scale coppicing and thin out the beech and sycamore. This was felt consistent with the spirit of the covenant, to keep the woodland in its original 'state'.

In 1970, pied flycatcher numbers were low in Devon, with less than 20 breeding pairs recorded in the county. However, the appearance of a breeding pair in Belstone (east of Okehampton) aroused the interest of Gordon Vaughan, a well known local birder. He set about encouraging the pied flycatchers by providing nest boxes throughout the area and by the early 1990s had well over 200 boxes across several sites, including 100 in Meldon Woods.

Pairs first bred in Meldon Woods in 1974 and by 1985 more than 50 nests were recorded from 200 boxes. In 1989 pied flycatcher numbers peaked with 68 nests from 207 boxes. From 1974 until 2000 just over 1,000 pied flycatcher nests produced over 5,000 fledged young. Gordon experimented by placing boxes up in threes, on nearby trees, in order to reduce competition from early nesting birds such as blue and great tits. The boxes were originally placed high up (4m or more) to avoid vandalism. However, the biggest 'enemy', he felt, was the dormouse!

Ian Brooker

Between 1989 and 1996, the number of pied flycatcher nests fell from 68 to 38, and dormouse-occupied bird boxes increased from 16 to 67. He therefore surmised that dormice commandeered pied flycatcher nests, especially when they emerged from hibernation; that dormice were predating pied flycatchers' eggs; and that when disputes occurred between dormice and pied flycatchers, dormice always won (*BTO News* May / June 2002 and *Devon Birds Magazine* Vol. 54, No 2 Sept. 2001).

In 2003 I began a dormouse nest box scheme in Meldon Woods and by 2010 I had 60 boxes in five rough lines. Some of the lines deliberately crossed the three lines of pied flycatcher boxes, resulting in some boxes being fairly close to each other albeit at different heights and on different trees. Part of the plan was to see if we could offer boxes specifically for dormice and reduce the 'strain' on pied flycatcher boxes.

Unfortunately, before we were able to collect enough data, Gordon sadly died. The monitoring of the bird boxes was taken over, the number of boxes has been reduced to just over 90 and most have been lowered to between 3 and 3.5m to facilitate ladder access.

The numbers of successfully reared pied flycatchers seems to be stable now (13 nests in 2011) but since 2009 I've seen a decline in dormouse numbers, with no young recorded in 2011 – the first time since 2004. Perhaps Gordon's pied flycatchers are finally standing their ground, although in reality I think the 2011 failure, and perhaps the previous population changes, had more to do with the weather.

The children from Okehampton Primary School have helped replace some of the dormouse boxes. They enjoyed their dormouse activities so much that they are now in the process of writing a dormouse story book and are even thinking about changing their school logo to a dormouse!

Ian Brooker
DNPA Ranger
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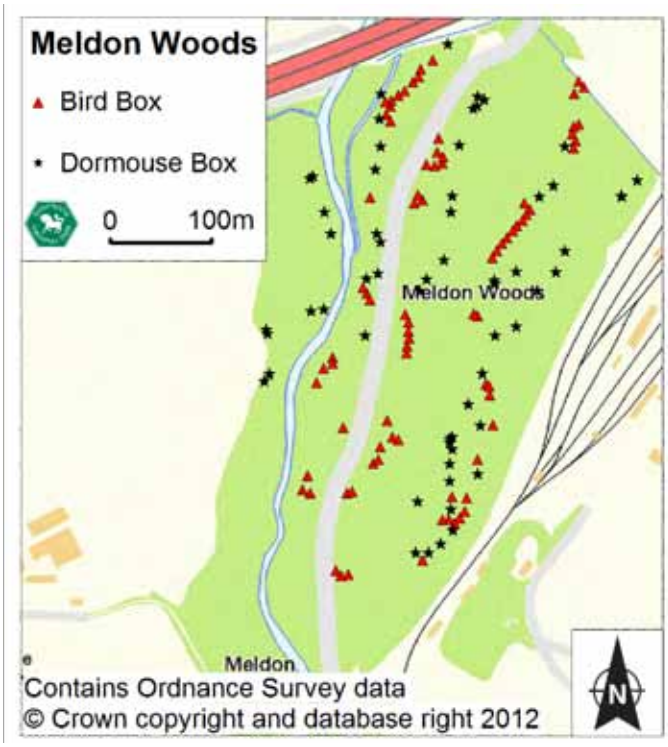


# Why didn't the dormice cross the gaps?

Last year's article on dormice and hedgerow gaps (*Dormouse Monitor*, Spring 2011) was a timely reminder of the pioneering work done by Paul Bright, with the encouragement and support of Pat Morris, in the 1990s. Before these observations were carried out in southern England, very little was known about the ecology of these fascinating animals. Between them, they laid the foundation for much of the work that has been carried out subsequently and also for the NDMP itself. Nevertheless, as time has gone on, we have learned new and perhaps surprising things about dormice.

One thing we have discovered is that dormice will cross roads. Many will have heard of the work that Leo Gubert and I carried out on the central reservation of the A30 in Cornwall. Our work will be published this year but, in summary, we have evidence that about 10% of the dormice we caught crossed at least one carriageway and one did so twice in a month! So how does this fit into our conception of the dormouse as an animal which lives in trees, hardly ever comes to the ground and 'avoids corridor gaps'?

I first became aware of the fact that dormice will cross small gaps in their habitat when I put some tubes in a short length of scrub in a wood in north Devon. The track split into two leaving a few tens of square metres of dormouse habitat, isolated by a gap of about 3m. It was much too small for a dormouse to live in full time but one turned up and made a nest in a tube. It happened when a broom (the shrub!) was in bloom but I don't know whether or not that was what attracted the dormouse. It can't have been the tube because there were others nearby it could have used without crossing the ground.

A year or two later, I had a phone call from Matt Pickard (a fellow consultant) who was foolish enough to put up some tubes on that particular central reservation of the A30, despite advice not to, and discovered a dormouse. Not long after that Simon Colenutt (another fellow consultant) told me of a site where a dormouse used a tube which was in a very small, isolated clump of trees, in a garden.

With all this evidence I had begun to carry out dormouse surveys in places where I would not have thought of looking earlier. One example is of a small area of fairly suitable habitat (about 2ha) which has big multi-lane highways to the south and the west of it and extensive arable fields to the north and the east. As is usual with arable fields in Devon there are substantial 'hedge banks' between them but they are heavily managed with a minimum of woody vegetation on them. The nearest large area of woodland is about 5km away.

In spring 2008, Stephen Carroll wrote an article for the *Dormouse Monitor* describing how the Devon Biodiversity Records Centre had been receiving records of dormice using bird feeders in gardens. When I asked Stephen whether he had recorded the distances the dormice must travelled on the ground to get to them he sent me a summary of over 40 observations. In most cases the distances to the nearest cover were small (less than 3m) and only two exceeded 10m (32m and 39m). However distances from the nearest suitable habitat (wood or hedge) were greater and six dormice had crossed between 20 and 80m to get to the feeders. How did they know that food was available? Could they smell the peanuts or were they just wandering around looking to see what they could find?

Bjorn Schulz and his colleagues in Germany found that a high proportion of 'traffic islands' they searched had dormouse nests on them. The islands were formed at road junctions where a looping slip-road connected two roads and isolated a small area of land which was then planted up with trees and shrubs.

Another interesting study was carried out by Sven Büchner, also in Germany, who looked at dormice in small woodlands. He found dormice in ten woods that averaged 2.9ha in size (the largest was 4.25ha) which were separated from one another by arable fields with no hedges. Several marked dormice moved between them and had to cross the ground for distances between 250m and 500m to do so.

So, what does this mean? How can we reconcile these observations with those earlier studies?

It is important to emphasize first that Paul Bright didn't say that dormice never cross gaps. He said that dormice are 'averse to gaps' and dormice did have to cross the ground in some of his experiments - to get to the nearest hedge from their nest boxes. He also observed

Paul Chanin

Dormouse #39 crossed this road twice in a month. One nest box is in the ash tree behind the 400yds sign, the other to the left of the signs on the other side of the road. The wood on the central reservation covers about 0.2ha.

dormice crossing small gaps (1m) on about half the occasions they encountered them.

Even so, it is worth pointing out that the dormice were not in familiar habitat but had been taken from their normal home range and released in a strange environment where they were radio-tracked for only one activity period before being recaptured. The original paper does not make it clear whether they were first caught in woodland or in hedges but does show that they were held in captivity before the experiments were carried out. Is it fair to assume that the behaviour of an animal in a strange environment on the first day of its release reflects typical behaviour? Difficult to say but this might be behind some of the apparent differences between those experiments and later observations.

Recent observations by Rymvydas Juškaitis in Lithuania have also shown that dormice can have home ranges split by woodland rides. It may be that they more commonly use such obvious features of the environment as home range boundaries - much the same way that badger territories often coincide with hedges, roads or rivers - all of which they can cross.

If dormice can cross distances of up to 500m under the cover of growing crops and several tens of metres over open ground, including roads, there are interesting questions to consider. For example:

- when do they do it?
- how often?
- why do they do it?
- does it matter?

It is hard to answer these questions. Interestingly five of the six dormice which Sven Büchner recorded crossing farmland were juveniles. Where they dispersing? Sven didn't report when it happened but did say that they had to cross through crops of wheat, clover and maize which indicated that it occurred before harvesting. We think that our dormice on the A30 probably crossed early in the year but can only be sure of this for the animal which crossed twice in one month (May).

The landscape in Saxony, Germany where Sven Büchner carried out his research on dormice.

PTES

On balance, it seems most likely that long distance movements and perhaps those across roads occur when the animals are dispersing. However, I am sure that if there is an incentive to do so - flowering or fruiting trees and shrubs or a good nest site - then a dormouse will cross a gap of several metres to get to it.

Notwithstanding Paul's experiments, it is worth remembering that every field in the country has at least one gap in it - a gate (and no farmer is going to let us plant those up!). Dormice living in hedgerows must become accustomed to crossing moderately sized gaps although they may well prefer not to site their home ranges in hedges with a lot of them. My guess is that they probably regularly cross small country roads and might even have home ranges split by them - certainly in parts of Devon where we have a lot of very good hedged habitat and huge numbers of tiny roads.

I think it does matter that we should fully understand the animal we are conserving. I am quite certain that people are failing to find dormice because their view of 'suitable habitat' is less flexible than that of the animals themselves. This matters a lot when it comes to doing surveys prior to development.

However I don't think that this means that the work that has been done in closing gaps and connecting up the landscape has been wasted. Any increase in the overall amount of dormouse habitat has to be welcomed and the fewer gaps there are, the better it is for the animals. It is also important for other, smaller animals which may find it harder to move around a gappy landscape than dormice or to attract funding for conservation work on their own behalf. The use of charismatic species like dormice and otters to do this has a creditable history and has done much to benefit things that creep and crawl around the landscape in the name of more appealing animals.

Dormice are scarce, a protected species, and nothing we have found undermines this or the protection that they receive. However we are now in a better position to concentrate our energies. Pat Morris' recent article on dormouse bridges (*British Wildlife*, February 2012) shows that there may be ways of enabling dormice to cross motorways using existing infrastructure and that is certainly something that we should concentrate our energies on. On the other hand, I don't think we need to worry quite so much about smaller roads and tracks.

Paul Chanin
Mammal Ecologist

# Dormice found on our first wildlife bridge

Britain's first wildlife land bridge is located above the A21 Lamberhurst bypass, in Kent. It was constructed primarily to retain the historic vehicular access point for people entering the National Trust's Scotney Castle Estate and was completed in 2005. The wide roadside verges up to the edge of the bridge were planted with hedgerow tree species to provide a wildlife link between land on either side of the bridge.

Dormice were known to occupy land directly to the west (map below area A) and a small wooded area 400 metres south east of the bridge (C), as well as within other areas of the Scotney Castle Estate. In April 2010 a new NDMP site, using 60 boxes, was set up to investigate areas previously thought to contain populations of dormice. Part of the rationale was to ascertain whether the populations divided by the road would be able to reconnect using the land bridge. Initially 10 nest tubes were placed on the land bridge in vegetation both on the warm southern side and colder northern side. In October 2010 a nest was found in one of the tubes, but it was uncertain whether this was made by a dormouse or another small mammal.

In March 2011, the tubes on the bridge were replaced with 10 new nest boxes. In May, James Hitchin, one of Scotney Castle's rangers, spotted a male dormouse in one of these boxes and a nest in an adjacent box, both on the southern section of the bridge on the western end. A dormouse was seen again in this area in June, whilst in July in a different box on the northern side of the bridge (again adjacent to the western land) another male dormouse was recorded. In September a female dormouse, with an unknown number of newborn young (as they were pinkies we decided to leave them undisturbed), was found on the northern section of the bridge, but this time bordering the eastern land. Interestingly in two years of recording we have not encountered any other dormice on land adjacent to the eastern edge of the bridge (B).

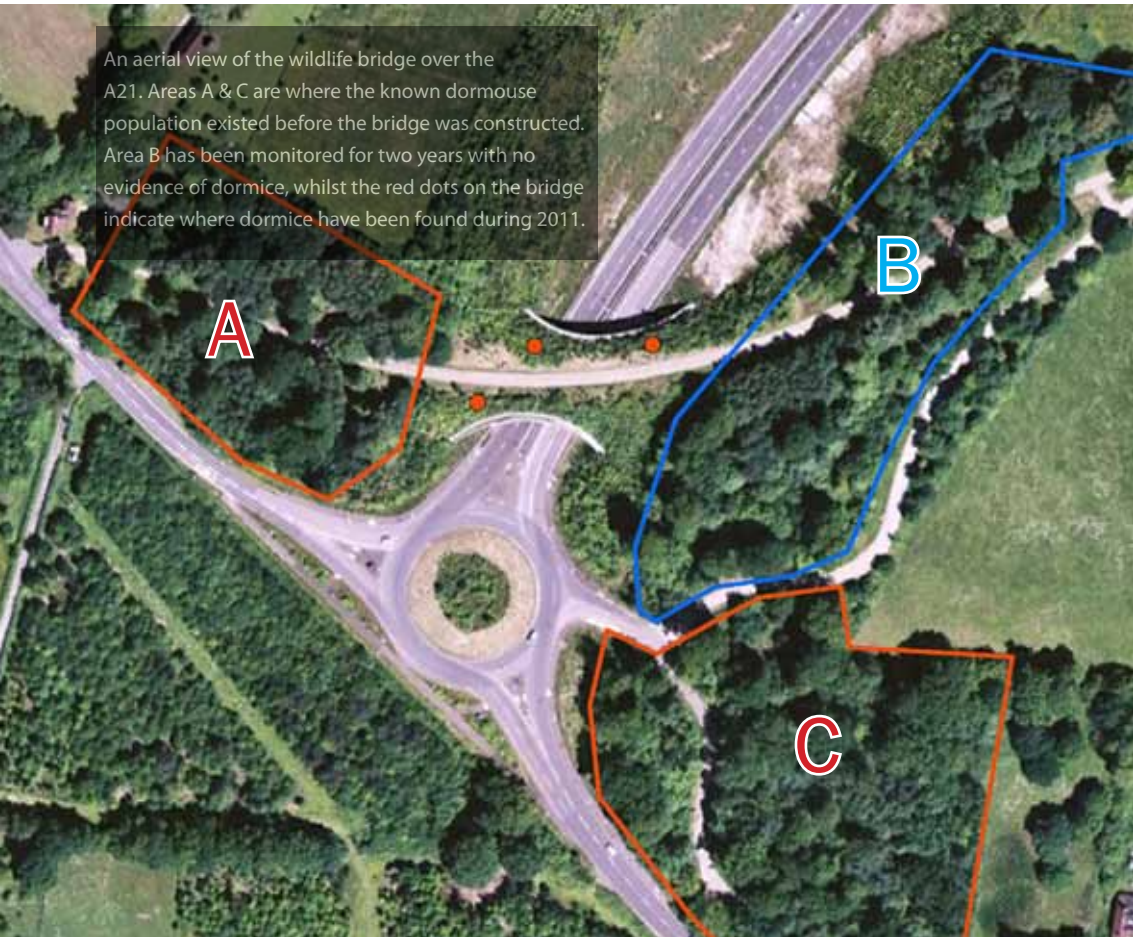
What does this reveal? That dormice have used the habitat to the north and south of the road and that breeding has successfully occurred on the land bridge. So six years after it was completed, firm evidence has been found that dormice are using Britain's first wildlife land bridge.

With evidence of a known population of dormice on land adjacent to the western edge of the bridge, but not on the eastern edge, it is tempting to suggest that the female dormice found breeding near the eastern edge had 'crossed the bridge' from the western side, but this cannot be proved, without further investigation.

We are currently seeking the permission of the highways agency to survey other land near to the eastern edge of the bridge to see if there are dormice in this scrubby area, to clarify if this might be where the 'mum' we found in September might have come from. It will also indicate whether another group of dormice, about 750 metres away, might be able to reach the land bridge, as the habitat between these areas of the estate seems currently to be 'not ideal' for dormice, the understorey being dominated by rhododendron. An improvement plan is in place for this area.

Additionally James is re-starting another monitoring site this year, on a separate part of the Scotney Castle Estate, some 1.25km away, where evidence suggests there are more dormice… there seem to be quite a lot on this National Trust property!

So in a quiet part of the Kentish weald new discoveries are being made which, we hope, will lead to more wildlife land bridges being considered when road schemes are planned; after all we have the evidence that they work, but do we have the political will to make them appear?




An aerial view of the wildlife bridge over the A21. Areas A & C are where the known dormouse population existed before the bridge was constructed. Area B has been monitored for two years with no evidence of dormice, whilst the red dots on the bridge indicate where dormice have been found during 2011.

Steve Songhurst NDMP volunteer; with help from fellow monitors James Hitchin (National Trust), Steve Oram (PTES) and David Scully, (Tunbridge Wells Borough Council).

# Taking a closer look at dormice in torpor

There are now sufficient observations of torpid animals each year to throw light on why they do it. Recordings from nest boxes made years ago showed that dormice spent up to about nine hours per day in torpor in the early part of the season, falling to less than half an hour per day in the autumn. We suggested that this reflected their need to conserve energy at times when food was in short supply. In the autumn (minimal time spent torpid) there was plenty of food available. But in early summer the animals risked spending more energy looking for food than they got from the meagre amounts they found. At this time, we thought, they would spend more time torpid as a way of reducing the energy cost of remaining continuously warm blooded. In other words, torpor was probably linked to food supply. This was speculation rather than proven fact.

However, that study was based on relatively few individuals. Now the NDMP offers another way of looking at the same issue from a different direction. Last year over 700 dormice were found in torpor. The percentage of dormice weighing more than 10g (i.e. eliminating nestlings) that were found torpid each month was calculated. From the results it's quite clear that they hardly bothered in August and September, warm months with abundant fruits and seeds available. But early in the season, when flowers may be finished and fruits not ready, food must be a serious problem. It is at this time that they eat more insects and also spend much time in torpor. This is why dormice breed later in the spring than other small mammals. You can't be torpid most of the time and also be producing and raising young.

In fact you can see that 'summer torpor' as an energy-saving strategy, progressively merges with hibernation (saving energy when there is no food at all over winter) as winter approaches in October and November. They emerge from hibernation but still spend (diminishing) amounts of time inactive with lowered body temperature until June. They don't simply wake up when hibernation 'ends'. It's almost as though their natural state is asleep, with only a small attempt at being active in late summer - truly the 'dormant mouse'.

Given a long series of data, which the NDMP is slowly accumulating, it may be possible to show the effects of weather and climate change, based on a comparison of numbers torpid from year to year. Good dormouse years will be those with lower than average numbers found in torpor each month; bad years will be ones where more animals spend more time torpid. In turn this may be related to breeding success. In other words we may be able to use torpor as an indicator of good and bad years - a nice little study for someone to pursue perhaps? Thank you to all the monitors.

Pat Morris

John Webley

# NDMP 2011 results

Each year, it seems, we can proclaim another milestone for the NDMP. In 2011 it was that 305 sites submitted data to PTES – that is a 20% increase on the number of sites in 2010. This is great news and shows that more and more people are willing to be trained to get their dormouse licence and take on their own site to monitor and check for this key species. All the data that are sent to PTES are used to analyse national dormouse population trends but an interpretation of local results and how they may compare with the broader picture may also be of interest to the site monitors. The increase in the number of sites may mask problems at some of them and also raise questions about how the dormouse populations at others are faring.

Of the 305 sites returning data in 2011, 241 recorded at least one live dormouse. 44 sites, however, recorded no evidence of dormice and 20 sites recorded evidence of nests only. About half of those with no records were new sites set up in the past four years and they may have been established on the basis of a nut record or anecdotal evidence and are still awaiting their first *in-hand* dormouse record. While some of the other sites have recorded a few dormice in the past, a limited number have long-term records indicating a healthy dormouse population which then appears to have disappeared. Records from Bottom Wood (Buckinghamshire) and Dedmansey (Bedfordshire) started in 1996 but neither site recorded any evidence of dormice in 2011. Similarly Laundimer Wood (Northamptonshire), Tiger Hill (Suffolk), Homefield Wood (Buckinghamshire), Burnt Wood (Staffordshire) and Forty Acre Wood (Staffordshire) have all recorded dormice for a number of years in the past but more recently have found no evidence of their presence. It is notable that the majority of sites with long-term records that no longer appear to have dormice present might be considered at the edge of the core current natural range of the hazel dormouse in Britain which could either suggest that the dormouse range is still contracting or that there has been a lack of appropriate management at those sites.

Sites that have long-term dormouse records *in-hand* from at least 2000 but recorded only nests in 2011 include Armstrong Wood (Cornwall), Coughton Marsh (Herefordshire), Lea & Pagets (Herefordshire), Radnor Wood (Shropshire) and Redlake cottage meadows (Cornwall). That dormouse presence in a year is only known from nests in boxes at approximately 8% of sites suggests misfortune on the timing of the check, a reduced or declining dormouse population or that there is a greater availability of natural nest holes in the wood.

In both instances of where no dormice were found or only nests were found it would be useful to know why. Has the dormouse population moved or died out? Has the nature of the wood changed over the past few years? While nest boxes may be considered to be a crude tool to monitor dormouse numbers, and chipping studies suggest that as many dormice that are using the boxes, are not, boxes still remain the best method we have. If evidence of a declining population or loss of a population is evident from nest boxes it would be useful both to investigate the suspected cause and seek to address the problem.

There was one record of a dormouse in a box in February at Jubilee Stone Wood in North Somerset and ten records of dormice during the annual box clearance at five sites during March – seven of these animals were torpid, one was active and two were dead. The first litter of pinks was not recorded until 14 May at Brampton Wood in Cambridgeshire – the site of the first dormouse reintroduction in 1993. Sometimes not many animals are found in May and June – it is a record of winter survival – but at Bontouchel in Denbighshire they recorded 35 in May and 54 in June in their 232 boxes. This site is monitored by the Northwest Dormouse Partnership and is one of the sites that is taking part in a long-term study using chipped dormice. Another Welsh site, Halfway Forest in Carmarthenshire, also recorded high spring numbers of 49 and 65 in 200 boxes.

Steve Morgan

| | May | June | July | August | Sept | Oct |
|---|---|---|---|---|---|---|
| **No. sites checked** | 204 | 228 | 197 | 192 | 212 | 242 |
| **No. negative sites** | 67 | 60 | 56 | 60 | 48 | 57 |
| **No. boxes at negative sites** | 3,185 | 3,378 | 3,197 | 3,372 | 2,366 | 3,575 |
| **No. of positive sites** | 137 | 168 | 141 | 132 | 164 | 185 |
| **No. boxes at positive sites** | 11,855 | 13,847 | 10,564 | 9,970 | 13,322 | 14,589 |
| **No. dormice** | 760 | 1,067 | 971 | 1,144 | 2,352 | 2,224 |
| **No. dormice per 50 boxes at +ve sites** | 3.21 | 3.85 | 4.60 | 5.74 | 8.83 | 7.62 |
| **No. dormice per 50 boxes at all sites** | 2.53 | 3.10 | 3.53 | 4.29 | 7.50 | 6.12 |

ABOVE: Table 1. The number of sites checked per key month during 2011, showing negative records and the numbers of dormice recorded at positive sites.

| | Total no. | Adult/juv torpid | Adult/juv active | No. dead dormice | No young |
|---|---|---|---|---|---|
| **March** | 10 | 7 | 1 | 2 | |
| **April** | 173 | 76 | 95 | 2 | |
| **May** | 760 | 352 | 350 | 5 | 53 |
| **June** | 1,067 | 234 | 678 | 6 | 149 |
| **July** | 978 | 102 | 526 | 6 | 344 |
| **August** | 1,172 | 24 | 630 | 11 | 507 |
| **Sept** | 2,349 | 4 | 1,423 | 27 | 895 |
| **Oct** | 2,197 | 118 | 1,774 | 19 | 286 |
| **Nov** | 207 | 53 | 147 | 6 | 1 |

RIGHT: Table 2. The number of torpid, active and dead adults and juvenile dormice (>10g), and the number of young (<10g), recorded at NDMP sites between March and November 2011.

The number of sites and the number of boxes checked as part of the NDMP, as well as the number of dormice recorded at each, are shown in Table 1 (above). Surprisingly there is not a large difference between the number of dormice recorded per 50 boxes at positive sites and the number of dormice per 50 boxes recorded at all sites. Less surprising is the population trend throughout the year; numbers are similar in May, June and July, start to increase in August, reach a peak in September and start to decline in October as animals begin to go into hibernation.

Although there is some evidence of dormice breeding in their first year, this is probably unusual and so the usual transition of a juvenile dormouse to an adult occurs after an animal's first hibernation. By definition therefore, all the animals in spring will be adults. In the early part of the year it is easy to differentiate between adult (>10g) and young (<10g) animals by weight alone but later in the year it becomes impossible to separate juveniles from adults unless that information is recorded while the animal is in the hand.

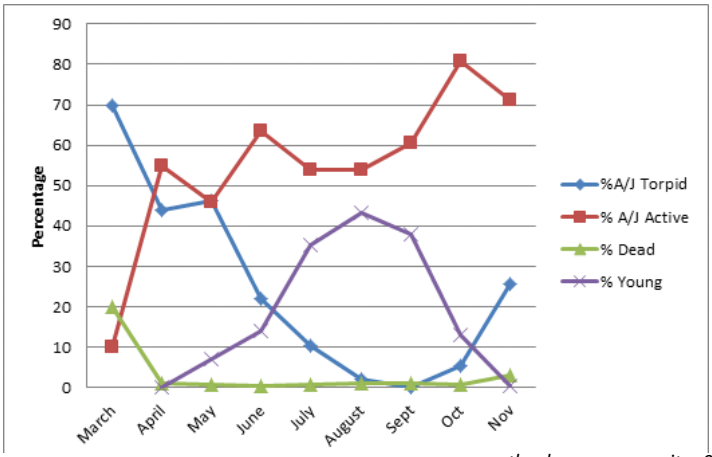
There may be a number of ways of assessing the health of a dormouse population at a site; the animals' weight by month and whether they are recorded in torpor may indicate good or poor feeding opportunities. The percentage of young in the population and their weight may show breeding success.

Table 2 (above) and Figure 1 (below) show a summary of the dormice that were found throughout the year at all NDMP sites and whether they were active, torpid or dead.

It is always interesting to know the average spring weight of dormice coming out of hibernation. During March, April and May a total of 943 dormice were recorded of which 761 adult animals were sexed and weighed. From the data gathered the average female dormouse weight was 16.98g (n=365) and the average male weight was 17.81g (n=396). The weights of the dormice found throughout the year are shown in Table 3 (overleaf) for comparison.

One of the woodlands that recorded the highest number of dormice in 2011 was Bradfield Wood in Suffolk. The monitors recorded a total of 312 dormice over three checks in June, September and October in the 250 boxes across the site. While there are many interesting sites within the NDMP, Bradfield is of specific interest as it was the site of the 2006 reintroduction. It was not possible to sex or weigh 22

RIGHT: Figure. 1. The % of the adult/juvenile dormouse population found in torpor & active between March & November 2011. The number found in torpor declines in spring and summer to almost zero and then it starts to rise again in late autumn. The lowest number found in torpor does not coincide with the time when the highest proportion of young are recorded in the population which peaks in August.



# NDMP 2011 continued

| | Young | | Female | | | | Male | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | n | Average weight g | n | Average weight g | Max. | Min. | n | Average weight g | Max. | Min. |
| **March** | 0 | | 3 | 18 | 20.5 | 16.5 | 0 | | | |
| **April** | 0 | | 59 | 17.57 | 27 | 12 | 89 | 18.06 | 27 | 11 |
| **May** | 53 | 1.93 | 303 | 16.85 | 27 | 9 | 307 | 17.74 | 27 | 10.9 |
| **June** | 149 | 5.45 | 393 | 21.38 | 25 | 9.5 | 360 | 16.99 | 25 | 9 |
| **July** | 344 | 5.18 | 236 | 18.46 | 30 | 9 | 260 | 17.26 | 26 | 10 |
| **August** | 507 | 5.08 | 224 | 19.21 | 31 | 9 | 224 | 16.27 | 24 | 9 |
| **Sept** | 895 | 6.05 | 456 | 17.81 | 32 | 8 | 519 | 17.06 | 31.5 | 8 |
| **October** | 286 | 7.34 | 759 | 19.11 | 39 | 10 | 856 | 19.44 | 40.4 | 9 |
| **Nov** | 1 | 13 | 72 | 19.56 | 30 | 11 | 104 | 19.83 | 31.5 | 11 |

LEFT: Table 3 shows the mean, maximum and minimum weights of young and adult/juvenile dormice recorded by month at sites in the NDMP in 2011.

| | Young | | Female | | | | Male | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | n | Average weight g | n | Average weight g | Torpid | Active | n | Average weight g | Torpid | Active |
| **June** | | | 13 | 16.81 | 3 | 10 | 9 | 15.5 | 3 | 6 |
| **Sept** | 69 | 5.54 | 32 | 16.12 | 0 | 32 | 19 | 16.39 | 0 | 19 |
| **October** | 11 | 8.86 | 69 | 17.45 | 0 | 69 | 68 | 18.18 | 0 | 69 |

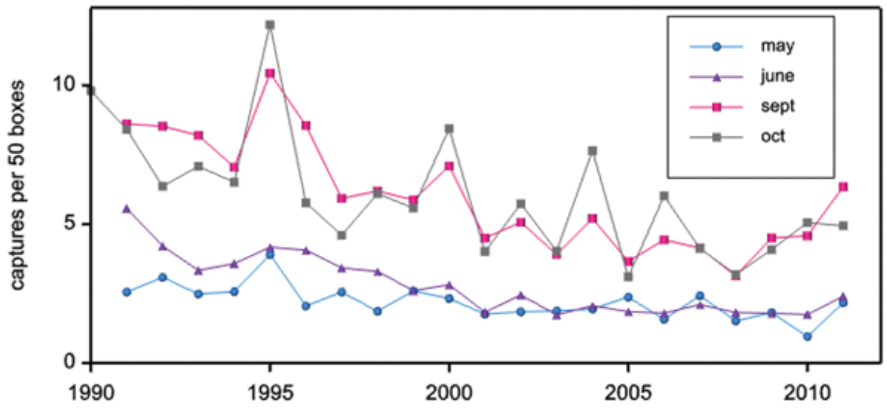
LEFT: Table 4 shows the mean, maximum and minimum weights of young and adult/ juvenile dormice recorded by month at Bradfield wood, Suffolk in 2011.

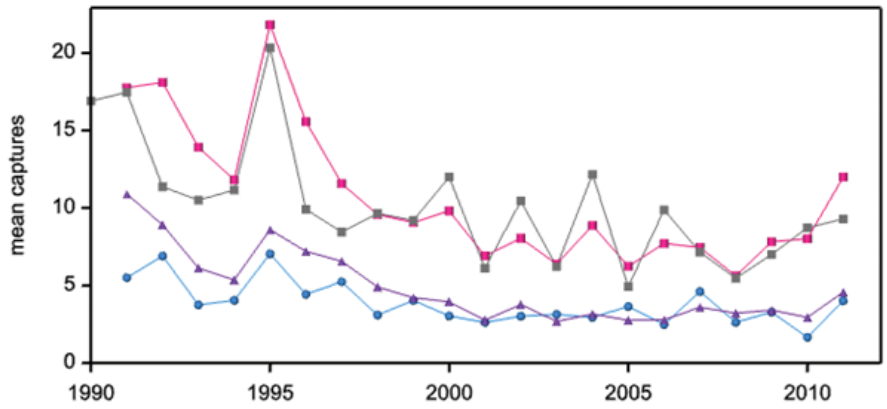
John Webley

RIGHT TOP: Figure 2 shows means for the four months of primary interest plotted over time. 2011 results look good, being higher than 2010 for everything except captures per 50 boxes in October.

RIGHT MIDDLE: Figure 3 shows the mean dormouse counts for each month. The top graph shows counts per 50 boxes whilst the lower one shows the simple means. Means are only shown where there are at least 10 counts in a month.

RIGHT BOTTOM: Figure 4 compares the four smoothed lines for the individual months with the curve fitted to data up to 2009 using just May and June data. The brown September line stands out, but this is perhaps misleading, since the difference relates only to the early period with comparatively few records. At the other end of the graph, the May line no longer stands out as much as it did last year as a result of the strong 2011 results.



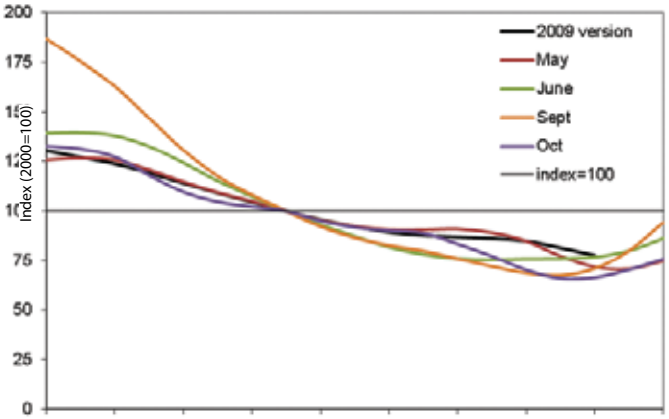




animals but the data on the remaining 290 animals are shown in Table 4 (left).

It is surprising that the average weights of adult/juvenile dormice at Bradfield Wood are less than those of dormice nationally in 2011. A recent European paper indicated that good weight females in spring would have a greater likelihood of breeding success than those females who came out of hibernation at relatively lower weight. This does not seem to be having a big impact on the Bradfield population however as, in September, the percentage of 'young' dormice in the population is nearly 58% compared with the national average of 38%. Weights might be down but breeding appears to very successful.

We are currently having the 24 years of data in the NDMP summarised by region and year so that we can compare dormouse weights and breeding success across sites at a regional level too. We hope that this may encourage monitors to undertake some more analysis of their own data and give us a greater idea of how local dormouse populations are faring.

In the meantime we have had the data from the last twenty years analysed by month. Previously the annual trends were presented with all the data from the May, June, September and October checks collated. Although the general trend hasn't changed, by splitting the data up we can ensure we are comparing like with like and the pre- and post-breeding numbers are clearly evident. There is a greater fluctuation between the September and October trend lines than there is between the May and June ones. These graphs pose many interesting questions, but importantly we need to look at the data against the backdrop of the habitats in which we are monitoring the dormice and see if there are any practical steps we can take to see an upturn in the trend line. We cannot do anything about the weather, either the mild or erratic winters or the wet springs and late summers.




We can, however, look at the management of the Woods where we know these populations remain. We need to ensure that we provide the dormice with a variety of species from which to feed on throughout the year, a varying age structure of trees (which means active management) and plentiful places for the animals to hibernate safely too.

Ian White, PTES

# Essex and Suffolk Dormouse Project

The Essex and Suffolk Dormouse Project (ESDP) was set up in 2002, with Robin Cottrill as the chairman. Then there was only one monitoring site in Suffolk at Tiger Hill and a few in Essex such as the Captain's Wood, which became the first NDMP site in the county. Funding from English Nature bought 10,000 nest tubes – the smallest order a manufacturer would accept. We're finally getting towards the end of that stock now!

With the support of Essex and Suffolk Wildlife Trusts and Essex Biodiversity Project we've come a long way since the humble beginnings at that first meeting in Robin's living room. Unfortunately dormouse numbers have declined at both Tiger Hill and Captain's Wood but we've had very positive results at other sites including two successful reintroductions in Suffolk, at Priestley Wood in 2000 and Bradfield Woods in 2006, where a whopping number of animals were recorded last October. There are now ten NDMP sites in Suffolk and seven in Essex, with a small army of volunteers carrying out nest box checks and maintenance. Our youngest volunteer is just eight and already an enthusiastic conservationist.

Our current focus is an ambitious long-term project which will map the dormouse distribution throughout both counties. Systematically working outwards from known populations and using predictive mapping to identify other potential sites, we've surveyed over 100 more. In 2011 we added a further ten new records to our dormouse site inventory but there are still lots of gaps to fill on the map.

We've learned a huge amount about dormice in both counties, including increasing awareness of the importance of so called sub-optimal sites, of which there are many in this region including coniferous plantations, large bramble patches on brownfield sites and secondary scrub on former quarry sites and roadsides. We're also looking more closely at the extent of urbanisation around at least two of our dormouse "hotspots" to investigate how the effects of isolation and possible predation can be mitigated.

Thanks to the hard work of volunteers and support of partner organisations we've achieved a huge amount in the last ten years, and it looks like we've got plenty to keep us busy for at least another ten.

Hazel Robson,
Essex and Suffolk Dormouse Group


TOP: a female dormouse found with four juveniles in an old nest tube at Layer Woods.

BOTTOM: our youngest volunteer helping with box checks at Tiptree Heath.


# Midger Wood monitoring site

This has been another interesting year for dormice and monitors. Ten of our regular monitors have dormouse licences and four have clipping licences. We have a variable number of monitors each month (from 5-14) as several have other work commitments, including ecological consultancy.

We saw a total of 28 dormice during 2011. As a result of clipping we know that three were also seen in 2010. We have had two families. The dormice seem to have survived the hard winter well but the wood mice have been scarce and the yellow-necked mice numbers didn't pick up in the latter part of the year until November when two yellow-necked mice took over the box that had been occupied by our family of six juveniles in October.

We have had our usual 20% box occupancy by small birds, mostly tits, in May and June and they seem to have been successful in rearing their young. We had one dormouse nest in a bat box too.

In the summer we were approached, through the Gloucestershire Wildlife Trust, by the BBC *AutumnWatch* producers with a request to film the dormice and the team for 2011. After some negotiation it was agreed that they would join our survey on October 17th. The filming team arrived and the dormice behaved perfectly. Six juveniles were found and filmed. They were very active but very co-operative and we were told that it would make a good film and would be screened in October. Unfortunately in October I had a phone call from the producer to say that there was no room for the film on the programme. That episode was disappointing, it was a real shame that after extra time spent surveying and filming, our dormice didn't feature!

Dora Clarke
NDMP volunteer

# Berkshire Mammal Group dormouse work

Berkshire Mammal Group (BMG) was set up December 2010 and has since then accomplished a lot including; mammal surveys, talks, attended events and gaining over 130 members. There was a scarcity of hazel dormouse records and only one monitoring site in Berkshire; therefore we decided that surveying for dormice should be a priority

Our dormouse activities to date include; a talk on ecology and conservation, six nut hunts, making 175 boxes, establishing and monitoring three new sites, developing a dormouse licence training scheme and a survey training day. We have had ad hoc records with photographic evidence from the public, including; dormice in tree guards from estate workers, a dead dormouse brought in by a cat, a dead dormouse in an owl box, a school's nature club finding a hibernating dormouse, a dormouse on a bird peanut feeder and an old record of a dormouse in a compost heap.

Four of our six nut hunts were successful. And at one site where no dormouse-chewed hazel nuts were found, we now know that there are dormice in the woodland across the road. The number of volunteers taking part in the nut hunts varied considerably from a meagre three people to 29.

BMG had a box-making day to supply the three sites with nest boxes. The timber was kindly cut up for us by Beale Park. We installed 50 boxes at two sites and 75 at a third. Unfortunately eight boxes have gone missing from one of the sites, presumed stolen, so these have bow been replaced. Hopefully whoever took them will submit any records! Two of our sites used to be monitored historically and it's great that dormice are still present at these sites and we can continue to monitor their dormouse populations. Although, we have had no dormice or dormouse nests yet in our new boxes! Fortunately at one of our sites we have had dormice in some of the old boxes for a few volunteers to see and handle. I am hoping that once the boxes are 'weathered in' this year we will have more animals using them. We have however had many other animals for volunteers to see and handle.

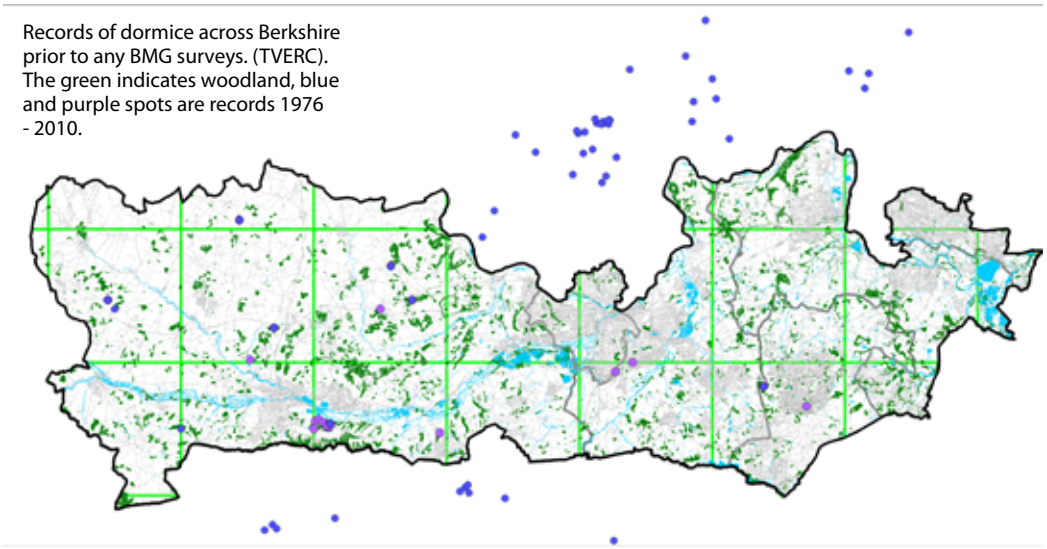
As BMG only had two dormouse licence holders we thought that we should prioritise box checks for people who want to work towards a dormouse handling licence and can commit to monitoring a site long-term in the future. This would allow us to establish more box sites to benefit conservation and monitoring of dormice as well as allow more members to be able to assist on surveys long-term. We produced a training and experience recording sheet (although we will now use PTES's new recording sheet) and ran a very successful dormouse surveying training day.

As well as the work we have done with hazel dormice we also had an excellent talk on the ecology of the introduced edible dormouse from Sebastian Perceau-Wells. BMG members assisted with the edible dormouse surveys in September. We are currently trying to locate any records of edible dormice in east Berkshire so please contact us if you know of any sightings.

Over the next year we will conduct more nut hunts, run another survey training day and will be setting up a fourth monitoring site to the west of Newbury. Most of our activities have been in west Berkshire due to offers of funding and sites. We do hope to establish records in east Berkshire too, if present. At the moment in the east of the county we have an unverified five-year-old record from a garden and our nut hunt was unsuccessful.

Finally I wanted to say a big thanks to everyone who has provided us with funding, boxes, facilities or time.

Daniel Atter
Berkshire Mammal Group
www.berksmammals.org.uk
dormouse.bmg@gmail.com



Records of dormice across Berkshire prior to any BMG surveys. (TVERC). The green indicates woodland, blue and purple spots are records 1976 - 2010.

Thames Valley Environmental Records Centre, 2010

Berkshire Mammal Group nut-hunting in Bisham Wood.

Rebecca Thomas

# Herefordshire dormice in unlikely places

For some years now I have been involved in surveying and monitoring dormice in Herefordshire's woodlands. I live in an agricultural landscape with few woods and had no idea that I was living amongst a seemingly thriving population of dormice until February 2005.

Whilst undertaking the parish 'litter-pick' I found what appeared to be a dormouse nest in the base of a tall thick hedge surrounding an overgrown, unmanaged traditional orchard. I showed the nest to many knowledgeable people and whilst it did look to be dormousey, no one was convinced that it was made by a dormouse. The nearest woods are 1km away and both are less than 10 acres. There are a handful of small copses in field corners no closer than ½ km from the orchard. There is however a good network of hedges throughout the parish. It would seem that the most suitable habitat for dormice in the area was the overgrown hedge and the orchard itself. The orchard at the time was 2.5 acres of almost continuous scrub, comprising mainly bramble, blackthorn, and hawthorn scrub amongst the old apple trees. The hedge, like most of those in the area, is largely hazel and hawthorn with a variety of other species including dogwood, spindle, field maple, honeysuckle and blackthorn.

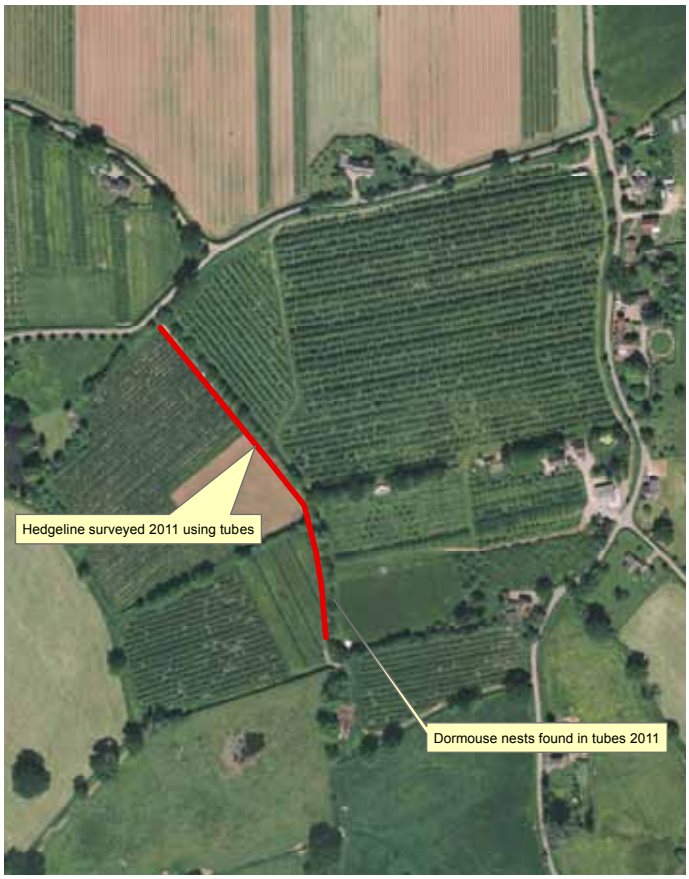
Then in the summer of 2006 we found conclusive evidence that dormice were present in the village: a local cat wandered into the garden (just 200m from the orchard) and dropped a 'present' for me. It was a large adult dormouse. The cat is unlikely to have carried the dormouse far and so it must have been in one of the nearby hedges, most of which are regularly flailed.

The following October we gathered 20 members of Herefordshire Action for Mammals to survey the neighbouring farms' hedges and two newly planted small woods. Two nests were found in bramble in the newly planted woods and one in a regularly cut hedge between two sheep-grazed fields. I publicised these finds in the parish magazine which sparked more interest and resulted in two confirmed reports of live dormice - one in a hibernation nest at the base of a hedge. Another dormouse was seen on a birdfeeder in the centre of the village during the day, behaviour that gets reported fairly regularly in Herefordshire and the surrounding counties. Then a further two nests were reported, one by the tractor driver who noticed the nest when flailing the hedge. Both nests were found in 'well-managed' roadside hedges well away from woods.

The village has a number of productive orchards and one, Dragon Orchard, is a 22 acre commercially run, traditional orchard, growing mainly apples, but with some pears, plums, greengages and quince trees. Other orchards and grazing fields adjoin it interspersed with

RIGHT TOP: Aerial photo showing the whole of the study site and the dormouse nests (green dots) and key areas of woodland (blue dots).

RIGHT BOTTOM: Aerial photo showing the commercial orchard (Dragon Orchard) where dormouse nests were found in tubes. The photos show clearly how agricultural the landscape is.

# Drainpipe box trials

hedges. One hedgerow is quite tall and in parts dense, whilst the roadside hedges are cut annually. The nearest woodland of any size is around 2km away and even small copses are in short supply. Since dormice and their nests kept appearing nearby, the orchard owners organised a dormouse afternoon in 2010 to involve their 'cropsharers' and local residents in understanding more about wildlife. Dormouse nest tubes were put up in the hedges and three nests were found in the denser hedgerow.

Walking around the parish it is clear that woodlands are not the key habitat for dormice here. They either roam much further than we realise or, more likely, are surviving in the parish hedgerows, hedge trees, pockets of scrub, small copses and even perhaps gardens and orchard trees that adjoin the hedge network. It is quite likely that other undiscovered populations of dormice still survive. These populations are very vulnerable as there appears to be little protection for the scrubby habitat that they are occupying. Sadly all of the scrub in the traditional orchard mentioned above, was completely destroyed in the summer of 2011 when the orchard changed ownership. Without a doubt we need to tighten up on regulations covering countryside management and take into account the needs of dormice and other native species through tighter laws and more accessible advice.

Kate Wollen
Forestry Commission

When it comes to dormice in Carmarthenshire, we talk a lot about our site Rhos Cefn Bryn (Wildlife Trust of South Wales). We have four sites in the county with dormouse boxes up and Rhos Cefn Bryn stubbornly remains the only place where dormice use the boxes. But it's early days. Most of our sites have only had boxes up for a few years whilst Rhos Cefn Bryn has been monitored for almost 15 years. There are dormice at the other sites of course but the dormice have other ideas on the best places to nest, and so far the boxes are not considered.

I've been monitoring Rhos Cefn Bryn for about six years and the occupancy of the nest boxes has appeared to increase and decrease depending on how wet it is. It's true what they say, it rains a lot in Wales and the further west you go, the more rain you get. It does make us beautifully green, but it also makes us soggy. The same is true for the wooden boxes, when its wet they get very soggy and it can be very wet all year round. In 2008 and 2009 the summers were particularly wet, even for us, and that really got me thinking. Box-use began to drop and I wondered if we could find something that would stay drier. In 2009 we visited Jack Grass in mid Wales to see the drainpipe boxes he was using. We decided to give them a go as they would be drier than their wooden counterparts. So in early 2010 we started a direct comparison at Rhos Cefn Bryn between the traditional wooden boxes and the drainpipes. To do this we erected a drainpipe box next to each existing wooden one, replacing any wooden ones where needed. That way the dormice had a choice at each location between the two types of boxes. The dormice started to use the drainpipes straight away but in 2010 there was a slightly greater use of the traditional wooden boxes (see Rhos Cefn Bryn, Wildlife Trust box trials, *Dormouse Monitor* autumn 2010). Throughout 2011, however, the drainpipes appear to have been a roaring success. We've had two mothers choose to raise their young in the drainpipes and no young being raised in the wooden boxes at all. Not only that but 2011 is the first time we've seen baby dormice for over two years. So the signs are promising. I'm encouraging the volunteers at our other sites in Carmarthenshire to put up some drainpipe boxes to see what we get. So watch this space!

Jacqueline Hartley
Carmarthenshire Dormouse Group

Wooden nest boxes may get too damp for dormice if they are not well-drained.

Jacqueline Hartley

# Blackford Wood National Trust site

The National Trust Holnicote Estate is situated within Exmoor National Park and covers 5,042 hectares. This consists of a wide range of habitats from high heather moorland, ancient oak woodland, shingle beach and salt marsh to farmland.

Much of the farmland lies within the vale of Porlock which is interspersed with many hedgerows and small pockets of woodland. For sometime though it was felt that the eastern end of the Vale of Porlock was lacking in tree cover particularly since the loss of the hedgerow elms in the 1970's.

Blackford wood was conceived as an idea in 2001 by the property staff at the time and an area of eight hectares was taken out of agricultural production and a deer fence erected around the boundary. Under the Forestry Commission's Woodland Grant Scheme planting of the new wood began in the autumn of 2001 by National Trust staff and children from the local Porlock First School. The area already incorporated an existing old hedge bank with established native shrub species, a stream corridor with mature alder and willow along its banks and a small pond.

The planting was designed to expand on these existing features to create a graded edge effect with shrubs to the outer edge (hazel, spindle, hawthorn, guelder rose, dogwood, blackthorn and alder buckthorn), small to medium trees to the inside (small leaf lime, cherry, field maple, willow and alder), and the main central component comprising of ash and oak. The trees and shrubs are now established and management of the wood is moving towards the long-term aims of creating a multi-purpose woodland for public recreation and wildlife habitats whilst also keeping open the option of producing some usable timber in the future.

In October 2010 Vanessa Mason, a licensed dormouse handler and volunteer for the National Trust, found some nuts that had been opened by dormice and so we decided to put up 27 dormouse boxes. The following spring National Trust Ranger Rob Manicom organised putting up boxes in two main areas of the wood starting with two boxes being placed on the back of fence posts facing into the mature boundary hedge that runs along the road.

We carried out the first box check on 20th September. The results were astonishing. Of the 27 boxes present, eight had dormice in them, another nine had dormice nests inside, two had wood mice present and three had old birds' nests in them. There were at least 23 dormice occupying the boxes. In the very first box (along the mature hedgerow) a lactating female was found and we did not disturb the nest to check for babies. Another lactating female was found with at least two tiny grey young (eyes closed). Again the nest was not disturbed further. Another box had five juveniles weighing on average 8.5g each, and in the last box, we found another female with five juveniles.

The boxes also revealed some extremely interesting nests. We found the classic nests made of stripped honeysuckle bark interwoven with green hazel leaves. But the more interesting ones were made of stripped willow bark. There was also one nest made with bracken and one using mostly very fine grasses with a few strips of

Vanessa Mason

# Daisy and the dormouse day

willow bark.

Recently National Trust staff and volunteers have begun to lightly thin some areas of hazel, ash and oak to introduce a more diverse age structure into the wood and create higher light levels to the woodland floor to encourage woodland flora. The wood from the first thinning will be stored on site and in the summer used to produce charcoal for sale locally. The mature boundary hedge, which has been left untouched for many years, has had a quarter of the total length laid. Other sections will be laid over the next eight years creating a good manageable thick hedge.

A further 25 boxes have now been put up and Blackford Wood will become an NDMP site. Children from Porlock First School will be invited back to accompany us when we carry out the first 2012 check in May. What a success story Blackford Wood is. The well-thought out design of the wood means it has become a fantastic habitat for dormice and other wildlife as well as a wonderful place for members of the public to enjoy.

Rob Manicom, Somerset Countryside Ranger, The National Trust, and Vanessa Mason, Volunteer, The National Trust

'Save the Dormouse', shouted the poster in Daisy's front room window. Not that many people walk past Daisy's house - a semi-detached on a quiet street in a Yorkshire town - but I happened to be visiting the family. Further probing on my part revealed the story behind the poster. Daisy had read about how the dormouse had become extinct in parts of its former range in the *Daily Telegraph* (as you do when you are six!), including in Yorkshire. She was determined to change this and had started a one-girl campaign to bring back dormice to the countryside.

I was shocked to hear that dormice had become extinct in the county in the last century and carried out some quick Googling to establish the facts. My learning curve was swift and steep. I had no idea dormice were so under threat, nor that they were a protected species. It certainly wasn't as simple as sticking a box in a nearby meadow and hoping a small furry creature would hop on in there. I found the PTES website and was soon in touch with both Ian Court, from Yorkshire Dales National Park Authority, and Ian White, Dormouse Officer for PTES, who had organised the release. We started a correspondence and I found out about the recent reintroduction site at Freeholder's Wood in Wensleydale, in the far north west corner of Yorkshire. Then I asked the question... could Daisy visit the dormouse site? I honestly expected a 'no' but to our joint joy the answer was a qualified yes. We had to wait until there was good chance of seeing a dormouse. Daisy may have been a very mature six year old but even the most informed of naturalists needs to see the evidence.

Finally the big day came on 9th October. Daisy's mum decided to accompany Daisy and the two set off in driving rain to Freeholder's Wood. Daisy's mum was so proud to be doing something worthwhile and very excited about the project. I was with them in spirit all day and then heard about the day in an ecstatic phone call that evening.

I asked Daisy what was the best part of the visit had been for her and she replied, 'When we saw a family of five dormice because they were wriggling and we weighed them in bags and they were so cute...and one ran up someone's sleeve!' And what was the hardest thing about the day? 'Slipping on the steep, wet banks!'

Daisy had helped with the box checks and had weighed, observed and even held a dormouse. I knew that it had been worth the six month journey. Daisy felt valued by both Ian White and Ian Court and proudly relayed all the news and information the next time I saw her. Hands on experience for children is invaluable and I'm sure Daisy is a convert for life; PTES aims to involve many more children in looking after our wildlife. My thanks go to both Ian Court and Ian White for their time, patience and generousity. By the way,the last word from Daisy: she is no longer six, she's seven.

Janet M Baird

PTES

LEFT ,TOP LEFT: one of the two juveniles found in box number 3.

LEFT, TOP RIGHT: Rob with the first dormouse, a lactating female.

LEFT, MAIN PICTURE: established species-rich shrubs along outer edges.

RIGHT: baby dormice in the nest.

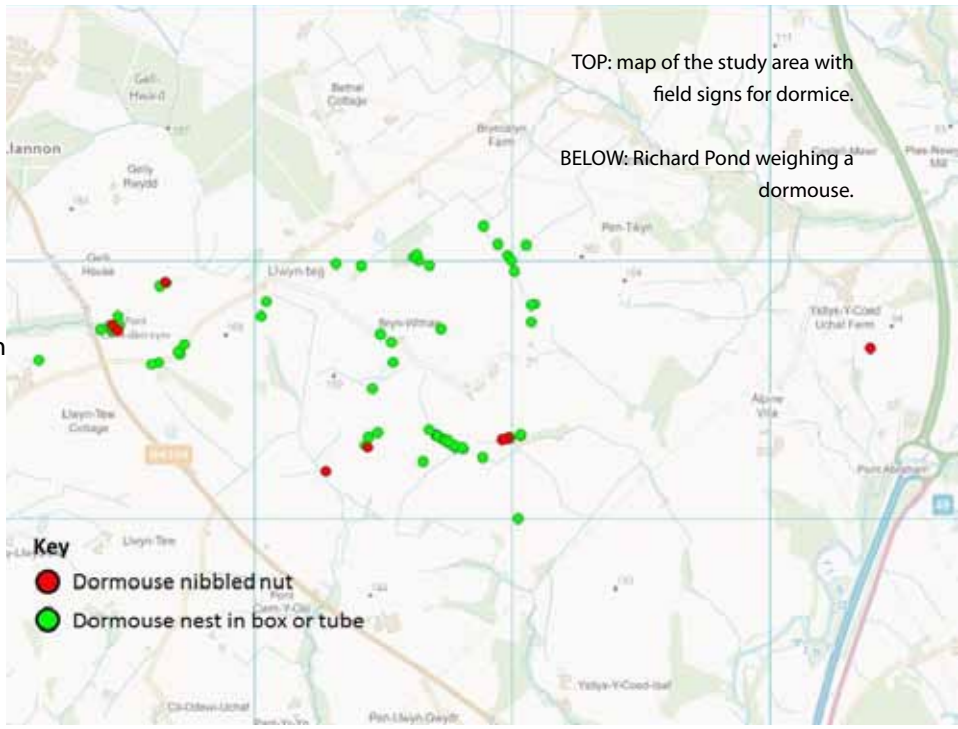
# How dormice use their landscape

Having completed a Countryside Management National Diploma with Triple Distinction in June 2011, I was extremely lucky to be given a PTES internship grant to study dormice. Dr Lizzie Wilberforce, the Wildlife Trust of South and West Wales conservation manager, supervised my project.
I wanted to look at the hedgerows and other links in the landscape and assess the potential weak, less well-connected areas.

A previous WT study in the area identified a number of hedgerows that contained gaps but also some that were well-connected to areas of suitable habitat where dormice may be present. The key links and weak areas now needed to be ground-truthed, and woodland areas that appeared to be linked to the known population needed to be checked to see if dormice were present.

Rhos Cefn Bryn reserve is 6ha and is made up of two fields of unimproved acid grassland which form a "Rhos" pasture of Devil's-bit scabious, the food plant of a thriving population of marsh fritillary butterflies. There is a small woodland area of 0.03ha with a hazel understory that is being sympathetically managed. I have helped monitor the dormice for two years. At first it was a little daunting since I hadn't worked on anything like this before. I soon settled in and quickly got used to the work. It was challenging, a delight and a privilege to be traversing through the fields and woodlands of the beautiful Carmarthenshire countryside, carrying out this important conservation work.

I spent a long time talking with private landowners to get their permission to survey their land. In total I put up 145 nest tubes and 88 nest boxes, mostly in the north-eastern and north-western parts of the study site (see map). I then tried to enthuse the landowners about the species and to encourage sympathetic management. Their response was really good and they showed a genuine interest, even stopping their vehicles in the lanes to ask if they have dormice on their land!




TOP: map of the study area with field signs for dormice.

BELOW: Richard Pond weighing a dormouse.

I found field signs in the woodland and hedgerows at the south of the project area, at the Pont Abraham M4 services. The river Gwili forms a natural barrier between two farms though the trees overhang the small river in places, and could provide small arboreal mammals with a route over. However I didn't find any field signs on the adjacent farmland. The Vincent Wildlife Trust then carried out a nut hunt just north of this area on my recommendation and dormouse-chewed nuts were found, providing important evidence of their presence along the dual carriageway, and confirming a landscape-scale link from the south to the north of the project area.

Once my surveying was complete, Lizzie Wilberforce managed to secure some funding and work has since been completed on a stock fence that has been erected and planted with native hedgerow species. It is close to the reserve and dormice have been discovered on adjacent land. Providing suitable habitat in such a key hedgerow will encourage dormice to spread out and take up residence, contributing to the conservation of the species in the area!

In December I hand delivered a Christmas card with photographs of dormice taken during the project to every farm and landowner as a personal thank you. I managed to see and talk to most of them and it was very rewarding to thank them for allowing me access to survey their land and to wish them a Happy Christmas! It was also a great opportunity to spread goodwill between the farming community and conservation organisations.

I thoroughly enjoyed coordinating the project and with the support of the project supervisor, bringing the project to an absolutely successful outcome. I am now the chief monitor and warden of Rhos Cefn Bryn reserve and I also monitor another site for the NDMP with Carmarthenshire Biodiversity Partnership.

Richard Pond
Rhos Cefn Bryn Monitor

Richard Pond

# Urban dormice

The Hadleigh Great Wood monitoring site in Essex (37ha) is owned by Southend-on-Sea Borough Council and is a little unusual compared with many of the woods in the NDMP programme, due to its very urban environment. The site is almost entirely surrounded by roads and houses and is well-used by the public (and their horses and dogs) for recreation. The site is now isolated from other woodland, but parts of it have been coppiced over many centuries and it supports a thriving population of dormice. It is also a SSSI and a successful reintroduction site for heath fritillary butterflies.

When dormice were first (re)discovered there in 2002, the Council were keen to publicise it and to engage the local community in their conservation, rather than keeping their presence a secret. They set up the Southend Dormouse Group, which joined the NDMP in 2006, and the group has played a part in the wood being awarded Green Flag status. From the beginning, members of the public have joined us on all tube and box checks (although the group has grown considerably in size and we have to allocate places each month to limit disturbance).

Despite the public nature of the wood, to date we have had relatively little disturbance to our nest boxes. Mind you, a rather aggressive gentleman, who spent two summers living in a tent in the middle of our monitoring area and stored batteries in one of the nest boxes, did cause us one or two headaches!

In view of the high level of public involvement, we tend to adopt a light-hearted approach to group communications and are always on the lookout for interesting and amusing anecdotes for our newsletter. While we do not mark our dormice for identification, a few animals (with distinguishing features) have gained star status within the group! Two of our favourites have been Lucky and Rosie.

Lucky was first found in July 2007. He was very thin and had obviously been in a fight or two. His head was covered in scars, he'd lost one ear and half his tail, and one of his eyes was badly infected. In fact, he seemed so ill that we debated whether he should be taken to a vet for euthanasia. However, as he had a healthy female in the nest with him, we figured he might have been the victor of the fight(s), so decided to give him a chance. We cleaned the eye up as best we could and put him back in the box, not expecting to find him again.

The following month we were delighted when he reappeared in another box. He had put on weight and the eye infection had cleared, although he had lost the eye. This is when we decided to name him Lucky (typical Essex humour). We found him again in both September and October, the last time with two females, at which point we decided that he was clearly living up to his name and that Essex girl dormice must like a "bit of rough".

Lucky survived hibernation, but his appearance the following May was the last time we saw him. Still, we like to think that he has quite a few descendants living in the wood.

Last year, we came to know Rosie, whose calm personality made her an ideal subject for our trainee licence holders. Rosie was identifiable because of her stumpy tail, preference for two of our nest boxes and her extremely laid-back attitude when being handled. We found her every month from April to July and were surprised at how calmly she always sat throughout being weighed and sexed. Her first litter of the year, born towards the end of June, consisted of four babies, (two boys and two girls) and we are sure that she briefed them about the monitoring process, as they all waited their turn patiently and seemed totally unperturbed by the whole thing. We last saw Rosie in September, with a second litter of newborn babies, and hope she will turn up again this year.

Membership of the Southend Dormouse Group continues to grow and we gain great pleasure from introducing people to these fascinating animals and meeting new characters, both human and animal!

Karen Bigmore and Sue Portsmouth, Southend Dormouse Group

Karen Bigmore

Southend Dormouse Group with their dormice

# Butyl pond liner nest box covers

There are over 100 nest boxes in Blackmoor Copse, a Wiltshire Wildlife Trust nature reserve near Salisbury. Many have been replaced over the years as weather (particularly rain), woodpeckers and squirrels have taken their toll. A recent survey showed that almost all the boxes needed replacing as soon as possible and, having received a generous £200 from PTES, we managed to make 78 external plywood boxes.

Tony Goddard

The boxes had Laura Ashley curtains fitted (only joking), and were erected. The last task was to protect them from the weather which was made possible by the very kind donation of two huge offcut sheets of 0.75 mm thick butyl pond liner by Porton Aquatic Garden and Pets Centre, at Porton near Salisbury. They donated 10m$^2$ which was cut up to provide butyl covers which were stapled onto the nest box lids. This made the boxes weatherproof, cosy and much more durable. We also protected all the older boxes so that they will last a bit longer whilst we seek further funding for more new boxes.

The dormice will hopefully appreciate the dramatic improvements when they wake up from hibernation as butyl is non-toxic, does not smell and so shouldn't deter them from using the boxes again this season. For more information email sue.wiltsimages@btinternet.com

Phil Smith

The Blackmoor Copse Dormouse Monitoring Team (Peter Docherty, Mark Hill, Tony Goddard, Phil Smith and Sue Walker).

# Nocturnal tree mammals, Romania

In the heart of Romania is Transylvania, a hilly land bordered by the Carpathian Mountains, with well-forested pure oak woodlands in parts, cultivated fields and pasture. Having read about my study site I was surprised, on visiting, to find a large variety of plants thriving here, the abundance of good-sized tree hollows and the thick shrubs and bushes that fruit abundantly and which are widely spread through the steppe-like forest meadows.

I have spent a long time studying dormice in Romania, and it seems there is competition between edible and forest dormice for shelters. However I was still not prepared for something strange we saw one August evening. A hollow, situated in an old pear tree in a meadow within the Sterjerenii forest, that had been occupied by edible dormice just the week before, was now home to a family of forest dormice. As we watched, six animals left the hollow.

Hazel dormice are common in the region and found in all forest types. Their natural nests are arboreal, located in tiny burrows or at the bifurcation of branches, in sunny bushes or even under the oak bark. Edible dormice are common in pubescent oak forests, especially at the edges, in more shaded places. Unfortunately forest dormice are rare so we were delighted to have found them nesting in the wild pear tree.

Petru Istrate, Romania

Petru Istrate