DORMICE AND CONIFERS IN WYRE FOREST – 2005 UPDATE

Phil Rudlin

I was expecting great things of 2005. After all the work of the winter of 2003/04 the area had been left quiet for over a year. Time enough for the Dormice that had survived the "holocaust" of the forest operations to have settled down, sorted their lives out and got used to their new environment.

May is always an exciting month, the first box inspection of the year, time to find out how the animals have faired over the winter. This year was no exception and in the research area of Ribbesford, 12 Dormice were found. This compared well with previous years. The following 3 months followed the same pattern; numbers found were either on or just above average. (Fig. 1)

However in September and October when we expected to find the most animals, as the young would be active and are often found as a family of four or five in a box, we found very few – 8 and 4 respectively. These are the worst autumn figures since we started the project in 2000. The positive side of it was there were more nests found in the boxes without finding animals at home. (Fig. 1) This may mean that the numbers were not as bad as first thought – just that they were tucked up in another nest close by. This we will never know and is the problem when the boxes are checked once a month and a Dormouse may have five or six nests that are used over this period. The numbers of young mice was also significantly down on previous years:

2003 – 26 Juveniles
2004 – 34 Juveniles
2005 – 11 Juveniles

This seems to suggest that it was a poor breeding year and this may be a reason for the lower numbers. Small mammal populations tend to rise and fall quite dramatically each year so perhaps this is the trough before the numbers start to recover.

Figure 1

	2003		2004		2005	
	Dormice	Nests	Dormice	Nests	Dormice	Nests
May	5	1	6	2	12	2
June	14	0	11	0	13	2
July	5	0	19	0	17	5
August	9	1	13	1	8	0
September	19	4	19	0	8	4
October	16	0	28	9	1	16
Totals	68	6	96	12	59	29

On the positive side 9 animals were found again from 2004 and 1 more that had been chipped in 2003. (Fig. 2) This is encouraging, as this animal was found in the same box that he was chipped in two years previously. How many other animals are we not finding again just because of the random timings of the box checks?

Figure 2

Treatment No	No. Chipped in 2003	No. Recaptured in 2004 and or 2005	% Recaptured
1	8	0	0%
2	8	7	88%
3	14	2	14%
4	9	4	44%
Total	39	13	33%

Treatment No	No Chipped in 2004	No Recaptured in 2005	% Recaptured
1	4	1	25%
2	7	3	43%
3	13	4	31%
4	8	1	13%
Total	32	9	28%

Reminder of Treatment Methods

Treatment 1 - (Hand cut with chainsaws and forwarder extraction - autumn) Small areas of conifers were felled (approx 20mx20m) to create small glades within the crop. The idea being that these would regenerate naturally in years to come and would provide viable habitat for Dormice by the time of the next operations in 5 years.

Treatment 2 - (Harvester operation with forwarder extraction – winter) method as treatment 1.

Treatment 3 - (Harvester operation with forwarder extraction - winter) Normal thinning operation removing 30-35% according to standard thinning tables.

Treatment 4 - (Harvester operation with forwarder extraction - autumn). Two Larger areas of conifers were felled (approx 0.3 Ha). This replicates the normal coppice size in the broadleaf scrub habitat, which Dormice favour. Again this should regenerate naturally in years to come and would provide viable habitat for Dormice by the time of the next operations in 5 years.

Two animals have now been found in all three years and both animals have stayed in the area they were found in prior to thinning operations. All three animals followed through micro chipping since 2003 have not moved far, if at all from where they were first chipped. This suggests, although only a very small sample, that the felling did not alter their home range.

13 new Dormice were found during 2005, which were big enough to microchip. Fig 3 shows the treatment areas they were found in. Three of the areas seem to be about even this year although more animals were actually found in treatment 2 and 3. (Fig 4) Again treatment 1 now seems to has the lowest population within it as well as the lowest survival rates.

Figure 3

Treatment No	No of Dormice Chipped in 2004	No of Dormice Chipped in 2005
1	4	0
2	7	4
3	13	3
4	8	3
Sausage	3	0
New Plantation	Not surveyed	3
Total	32	13

Figure 4

Treatment No	Dormice Found 2005	Recaptures
1	4	1
2	23	4
3	26	5
4	6	1
Sausage	0	0
New Plantation	4	*
Total	63	11

* Not surveyed prior to 2005

There was also disappointment in the area we called the sausage due to its shape on the map. This was a planted in 1995 with Corsican Pine. It has failed as a crop, but has a good shrub layer of Oak and Birch regen with thick bramble and bracken with a thin mature Oak canopy. In the last few years this has been a good area for Dormice. Left undisturbed completely by the thinning operations it was considered a buffer zone where the mice would be able to recover if the habitat was unsuitable after the work. However over the last two years the signs of Dormice have declined. 5 animals were found in 2003, 6 in 2004 and just 1 in 2005 (4 dead young were also found, apparently deserted at birth) Most significantly no new unoccupied nests were found which suggests that the Dormice were not using this area.

In April 2005 a further 50 boxes were erected in an area of Larch and Corsican Pine which was planted in 2000. This plantation grew well and has provided a thick, mixed habitat of Conifers, bramble and bracken. Dormice had been tracked to the edges of the plantation a few years ago but nothing had been done about finding animals in the rest of the impenetrable plantation. Racks were cut through the bramble to gain access and the boxes were put on stakes, as there were few trees large enough to hold the weight of the boxes. In June the first Dormouse was found. A further 2 animals were found later in the year and 5 nests. This was the most encouraging sign yet. Dormice are known to be adaptable and have to move if habitat becomes unsuitable or if the population expands naturally. So far none of these animals have been found with chips on from other areas but it was great to find animals in a new site.

6 boxes were also put into one of the areas in Treatment 4. (Coppice) It was not expected that the habitat would be suitable for Dormice for a few more years as the vegetation was sparse with the few trees still standing in the area being small and unconnected with the surrounding forest. However, in October much to our surprise 2 of the boxes had fresh, well made Dormice nests in them. Although not occupied this was great to see, as the animals would have spent a great deal of time and effort building the nest – so something must have been to their liking! In both cases there was little or no vegetation around the tree and certainly no "unbroken" route to the mature forest. Therefore the animals must have spent some time on the ground fetching and carrying the nest materials.

2005 Records

The above figures are for the research area of Ribbesford. However this does not tell the whole story. There are now almost 550 boxes in the whole woodland: 325 in the research area and a further 215 in the surrounding woodland. 300 of these boxes have been in Ribbesford for nearly 10 years now. If we just look at these old boxes it gives better idea of the population trends. Unfortunately looking at these boxes 2005 was not a good year! Charts 1 and 2 show the number of Dormice found in October and throughout the year respectively. 2005 has been the worst year yet, with just 1 young mouse found in October and 20 in all six inspections. Although this is not a good sign it does seem to mirror the decline in the research area. Most of the old boxes are in areas where there has been no forest work undertaken for many years so they have been left undisturbed. The habitat is changing, woodland is dynamic after all and maybe it is becoming less suitable each year. This is difficult to tell on the ground as to the human eye little has changed. If this is the case the research area could be vital in improving our knowledge for future management in these areas.

A theory of mine last year was that the boxes were becoming old, damp and smelly – 50 of the most used boxes in the past were replaced, just 1 of these has been occupied. So much for theories! All is not lost, however, this may just be a natural low before they recover.

No signs of Dormice have been found in any of the boxes in the mainblock of Wyre in 2005.

In the summer of 2005 an area adjacent to where Dormice have been found on Wimperhill was felled. During the winter most of the brash has been burned and local Oak and Hazel will be planted on the site. This will hopefully be attractive in the future to any mice that are still in the area.

Much of this work could not have been accomplished without the assistance of our Forest Research department. I would like to thank Roger Trout for his support over the last 5 years. More recently, research assistant, Jacqui Neal has spent many hours in Ribbesford and was able to find most boxes without my help! Unfortunately her contract came to an end and she has not been replaced. However we have been fortunate that Liz Appleton, who has spend many years looking at Dormice in Essex, has moved to the area. She spent the summer as volunteer, helping Jacqui and myself. She is now being trained up to microchip and monitor our Dormice for the foreseeable future – it continues!!

Chart 1 - October Occupancy - 1996 to 2005

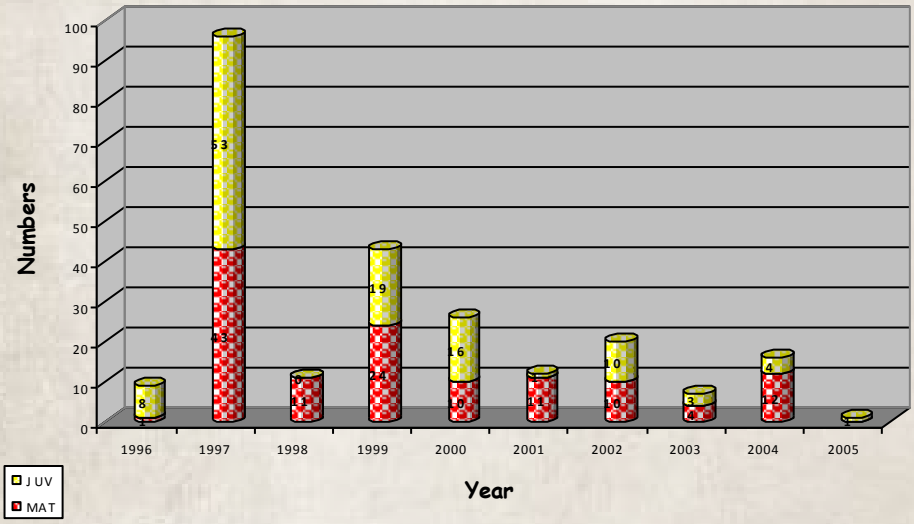

Chart 2 - Total No. of Dormice Found in Boxes - 1996 to 2005