Dormice and Conifers in Wyre Forest 2011 update

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After the record year of 2010 and a decent cold winter, which should have benefited hibernating Dormice, I was hopeful of another good monitoring season. The first inspections of the year, in May, went well, finding 16 animals which had survived the winter. This was the second best start to the season and therefore expectations were high for subsequent checks. However, these expectations were never realised and it seemed to go downhill for the rest of the season! (See Figs. 1).

After last years good breeding success it was somewhat surprising to find so few animals through the year. Just 8 out of 26 juveniles chipped in 2010 were found again in 2011. Did the others not survive the winter? Had they dispersed away from the research area? Were they predated? Or had they simply not used the boxes on the days we checked them? Answers? I am afraid not! My guess is it is probably a combination of all of these factors. However, we have never found any of the young animals chipped in the surrounding woodland. True, the boxes are only on the edge of the plantation on the opposite side of the forest road and not deeper into the forest, but we would expect to find a few as they moved from their birth place. I hope to find some of them in the next few years. This is the advantage of the micro-chipping as we will be able to identify individuals without any doubt and hopefully plot their movement – if we can find them! Numbers of young in the boxes were also well down from previous years (see below) and only 19 fresh nests were found in boxes that weren't occupied. This suggests that the number of animals using the boxes was much reduced as finding a fresh nest is confirmation that Dormice are using them.

2003 - 26 Juveniles
2004 - 34 Juveniles
2005 - 11 Juveniles
2006 - 22 Juveniles
2007 - 10 Juveniles
2008 - 34 Juveniles
2009 - 6 Juveniles
2010 - 35 Juveniles
2011 – 5 Juveniles

Fig. 1

	2003		2004		2005		2006		2007	
	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests
April									3	0
May	5	1	6	2	12	2	15	3	20	3
June	14	0	11	0	14	2	11	8	16	0
July	5	0	19	0	17	5	6	4	8	2
August	9	1	13	1	8	0	4	1	7	4
September	19	4	19	0	8	4	10	3	8	0
October	16	0	28	9	4	16	18	8	2	0
Totals	68	6	96	12	63	29	64	27	64	9

	2008		2009		2010		2011	
	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests
April								
May	5	2	10	1	7	2	16	0
June	9	11	9	1	11	6	4	0
July	11	1	4	5	9	8	5	9
August	16	8	8	0	28	7	5	1
September	8	6	8	3	20	8	8	2
October	18	2	1	1	30	6	4	7
Totals	67	30	40	11	105	37	42	19

This article is an extract from the Wyre Forest Study Group annual Review 2011

Treatment No	No of Dormice chipped in 2004	No of Dormice chipped in 2005	No of Dormice chipped in 2006	No of Dormice chipped in 2007	No of Dormice chipped in 2008	No of Dormice chipped in 2009	No of Dormice chipped in 2010	No of Dormice chipped in 2011
1	4	0	3	1	0	2	8	0
2	7	4	12	5	11	2	2	4
3	13	3	9	4	2	3	4	2
4	8	3	0	0	2	2	4	3
Sausage	3	0	0	1	2	0	1	1
New plantation	Not surveyed	3	1	0	4	1	19	3
Unthinned area	0	0	0	0	3	1	1	0
Total	**35**	**13**	**25**	**11**	**24**	**11**	**39**	**13**

Fig. 2

The total number of Dormice found in the research area was also poor. The total for this year of 42 is well below the 67.6 average over the last 9 years.

A further 13 animals that were big enough to microchip were found in the research area - 8 adults and 5 juveniles. (See Fig. 2)

Although 42 animals were found in the research area and adjacent woodland in 2011, we know from micro-chipping that some of these were found on multiple occasions.

From this information we know there were at least 26 different Dormice in the area. This figure is worked out from the individuals chipped during the year or recaptured from previous years. It includes juveniles which were big enough to chip, but not those which were too small to chip, as they may have been found again later in the year and chipped, therefore duplicating results. This again is the second poorest figure since the start of the project (See fig. 3).

13 adult animals were recaptured from previous years, which is proportionately better than 2010 (See Fig. 4). However, only 11 were chipped in 2009 whereas 39 were chipped in 2010! Of the managed area within the research site, treatment 3 has again shown the poorest results with no animals found. This is particularly strange as it has always held good numbers of Dormice since the project began. It has now been thinned twice during the project and the light levels have increased dramatically. The bramble has responded well and is increasing within the plantation. It is possible that the Dormice are now using this habitat for nesting in, rather than the boxes. This would be good news, if we could prove it, as it is exactly what we are trying to produce! (See reminder of Treatment methods below). The area known as 'New Plantation', (11 year old Corsican Pine and larch) is also well down on last year's figures, which were exceptional. Why? I have no idea! However, the same tangle of bramble exists here as in Treatment 3, so maybe they are just utilising the natural vegetation.

Fig. 3

Treatment No	No of individual Dormice found 2004	No of individual Dormice found 2005	No of individual Dormice found 2006	No of individual Dormice found 2007	No of individual Dormice found 2008	No of individual Dormice found 2009	No of individual Dormice found 2010	No of individual Dormice found 2011
1	4	1	3	4	3	3	9	4
2	9	9	14	11	13	3	5	9
3	16	10	13	9	4	11	5	0
4	9	4	3	1	4	2	6	3
Sausage	3	0	2	1	2	0	2	2
New plantation	Not surveyed	3	1	0	4	1	26	7
Unthinned area*	0	0	1	2	3	2	2	1
Total	**41**	**27**	**37**	**28**	**33**	**22**	**55**	**26**

* Area adjacent to research site, on other side of forest track. 15 boxes erected in 1993 and a further 20 in 2005

Treatment No	Dormice found 2005	Re captures from previous years	Dormice found 2006	Re captures from previous years	Dormice found 2007	Re captures from previous years	Dormice found 2008	Re captures from previous years
1	4	1	4	1	9	2	1	1
2	23	4	28	9	20	7	36	6
3	26	5	28	10	21	12	11	3
4	6	1	2	2	2	1	4	2
Sausage	0	0	0	0	5	0	10	0
New Plantation	4	*	2	1	7	0	5	1
Unthinned area*	0	0	1	0	2	0	3	0
Total	63	11	65	23	66	22	70	13

Treatment No	Dormice found 2009	Re captures from previous years	Dormice found 2010	Re captures from previous years	Dormice found 2011	Re captures from previous years
1	3	0	19	1	7	3
2	12	3	13	3	14	2
3	17	7	8	1	0	0
4	5	1	11	2	3	0
Sausage	0	0	2	1	6	2
New Plantation	1	0	50	7	10	5
Unthinned area*	2	1	2	1	2	1
Total	40	12	105	16	42	13

Fig. 4

Not surveyed prior to 2005.

* Area adjacent to research site, on other side of forest track. 15 boxes erected in 1993 and a further 20 in 2005

We have now been micro-chipping for 10 years and have therefore followed some individuals for some time. In 2010 we had three animals that were at least 3 years old. None of these were recorded in 2011. However, we did find one 3 year old, chipped as a juvenile in 2008 and two 2 year olds chipped as juveniles in 2009. (See Fig. 5)

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. (This has now been carried out using machinery and combined with Treatment 2)

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

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

Treatment 4 - (Harvester operation with forwarder extraction - autumn / winter). Two larger areas of conifers were felled (approx 0.3 Ha). This replicates the normal coppice size in 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.

number	chipped	micro-chipped		boxes used	recaptures	age in 2010
519202	Sep-08	Juv	Male	6	8	3
444998	Sep-09	Juv	Female			2
341477	May-09	Juv	Male			2

Fig. 5

Conclusion

After last year's exceptional results it was somewhat of a surprise to find so few animals or nests in the research area. This is the advantage of long term monitoring as we know each year is different, with so many variables we have no control over or, in some cases, knowledge of. If we took last years results alone, all would be rosy and we could pat ourselves on the back. If we just took this years results, we would be worried and wonder what we had done wrong! However, if we look at the long term trends, the numbers have always fluctuated, for whatever reasons. The important fact is that the Dormice are still there after all our forest operations, which is our main aim. The habitat, food sources and structure of the woodland are improving. The rest is up to them!

I would like to thank Roger Trout, previously from the Forestry Commission Research Department, for his continued effort and support, despite retiring! We have been working together now for 11 years and still have a lot to learn.

I have been fortunate again this year to have had plenty of other willing helpers, walking the many rows of boxes. For the last few years we have been assisted by Andy Bucklitch, who is now fully licensed and looking for Dormice throughout the county of Worcestershire and beyond! Kate Morris (Formally Swinburne) from Natural England based in Cumbria continued to help out when possible to gain experience in handling Dormice for her licence. Camille Newton from the Warwickshire Dormouse group came along to all our box checks, also to gain experience of handling Dormice for her licence. Alex Lane came for the first time in May to learn more about monitoring and habitat management. Liz Nether, who has been helping for the last 6 years, continues to help when work commitments allow!

I would like to thank all of the above for their sterling efforts in assisting with such a valuable project – without them it would be extremely difficult to maintain the level of monitoring, which will hopefully continue for the foreseeable future.

Other Ribbesford Records

The above figures are for the research area of Ribbesford. However this does not tell the whole story. There are now 578 boxes in the whole woodland: 363 in the research area and a further 215 in the surrounding woodland. 300 of these boxes have been in Ribbesford for over 16 years now. If we just look at these old boxes it should give a better idea of population trends. There are 86 of these old boxes in the research area and the remaining 214 are spread throughout the rest of the woodland. During inspections, 6 Dormice were found in the old boxes within the research area and 5 outside. (These 5 were all young Dormice in October, which exploded from the box when opening the lid. The box is adjacent to the downhill mountain bike course and in recent years is the only area, outside the research area, with confirmed records of Dormice).

Due to work constraints and the fact I was recording very few animals in these old boxes outside the research area, I have only checked them in June and October since 2010. This would normally throw out any long term comparisons. Although I found a further 4 nests in these boxes in October I have included the charts below and feel they are still representative.

Wyre Forest main block records

No evidence of Dormice were found in the 3 box schemes in the main block of Wyre Forest (Parkhouse, Wimperhill and Button Oak). However, over the last three years Dormice have been recorded in a garden at Button Oak. This has continued during 2011. A number of animals were observed feeding on the peanuts provided by the house owner. A camera was placed to watch them from the 1st of May, with the first animal seen at 11pm on 21st May. Over the spring and early summer they were seen regularly feeding with Woodmice on the nut feeder (see photos 1 & 2). The most seen at one time was 5, at 8:30pm on 5th June. These would be adults feeding up prior to the breeding season and it is interesting to see them feeding during the daylight as they are supposed to be nocturnal! The food and camera were removed from the 21st July to the 19th October. After putting the food back no animals were seen in the autumn. This seems rather strange, but at least there must have been plenty of natural food nearby for them to fatten up for the winter. Maybe this is the answer – peanut and apple feeding stations in the woodland!

The only established site in the main block of the Wyre Forest is towards the western end of Dowles Brook, recorded by David and Brenda Rea. 20 Dormice boxes are now in this area. These are checked twice a year, June & October. Just one male Dormouse was found in June and a further three boxes with nests built and used by Dormice.

Finally, a new site may have been found on Longdon Orchard! During a field visit by the Wyre Forest Study Group looking for Snow Fleas, a Dormouse nest was found by an eagle eyed member, David Scott. The nearest known recent record is about half a mile away on the other side of Dowles Brook. It was found in mature heather on the edge of 10 year old Scots Pine. Further investigations will follow this year to confirm their presence!

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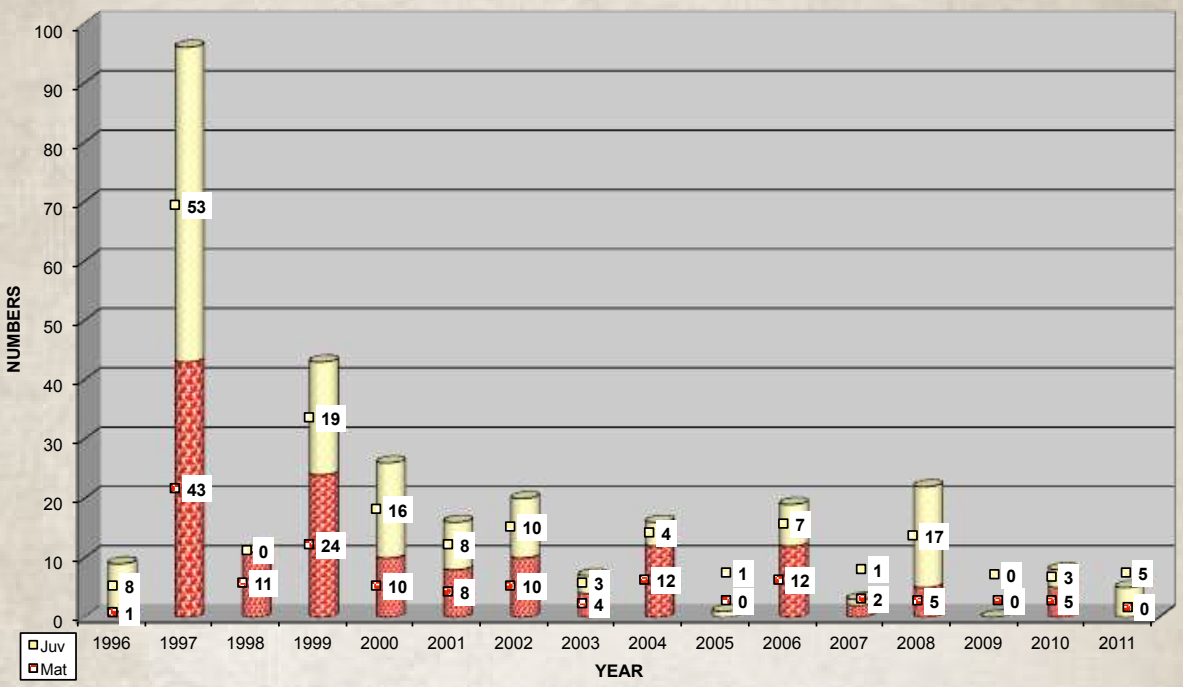
CHART 1 - OCTOBER OCCUPANCY BY DORMICE - 1996 - 2011



TOTAL NUMBER OF DORMICE FOUND IN BOXES 1996 - 2011

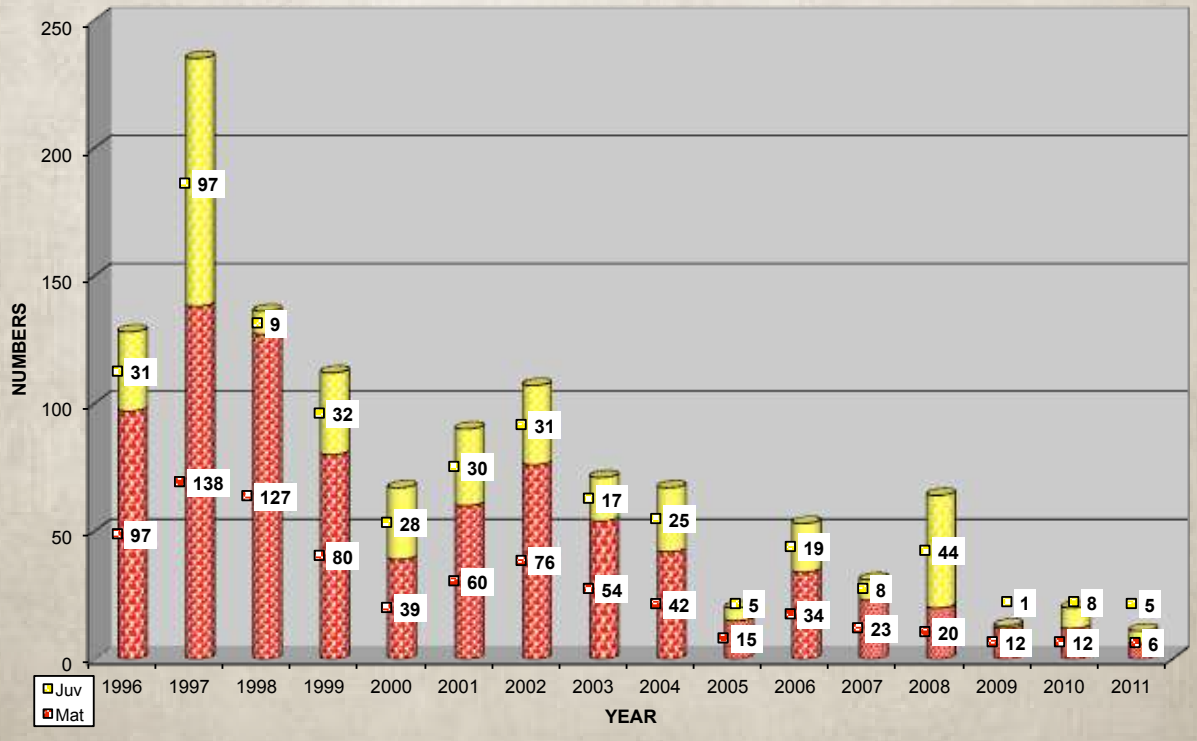


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Photo 1. Dormouse eating apple, Button Bridge R. J. Timmins

Photo 2. Dormouse eating peanuts,Button Bridge R. J. Timmins