



Wyre Forest Study Group

Dormice and conifers in Wyre Forest ~

2008 update

PHIL RUDLIN

After the very wet summer of 2007 and the relatively poor breeding success of the Dormouse in these conditions, it was with some trepidation that box inspections began in May 2008. It was not a great start, just 5 animals were found in the research area (363 boxes) compared to 20 in 2007. This was the worst start to the season since 2003 when the same numbers of animals were found. (See Fig. 1) June wasn't much better with just 9 animals. 11 were found in July, although this included a brood of 3 young Dormice, which was encouraging. By August, although the weather was not that friendly, the Dormice were starting to show up more in the boxes. 16 were found, which was the best since the research began in earnest in 2003. September was disappointing, with just 8 animals, although 6 of them were juveniles. October is usually thought of as the best month to find Dormice in boxes. The juveniles are dispersing, looking for their own "patch" to live in and the adults are fattening up for the winter and seem to prefer the boxes for daytime shelter. However in some recent years, this theory has been challenged, especially last year when just 2 juveniles were found in the research boxes! However 2008 showed that predicting any wild animal is all but impossible as we had the equal best numbers in October since the project began, with 18 animals!

The most encouraging aspect of this years work is the number of young Dormice found. 3 times the number from 2007, which again equals the best result since the project began. (See below)

- 2003 - 26 Juveniles
- 2004 - 34 Juveniles
- 2005 - 11 Juveniles
- 2006 - 22 Juveniles
- 2007 - 10 Juveniles
- 2008 - 34 Juveniles

The total numbers of Dormice found in the research area has been very similar over the last 6 years. The total for this year of 67 is just below the 70 average.

One interesting factor which is emerging from the data, is the number of Dormouse nests recorded in boxes in which animals are not found during the season. This year we found 30 new nests in the research area, of which 24 have never had Dormice recorded in them. We know from radio tracking that they have an average of about 5 nests and anything up to 10 at any one time. It is therefore not surprising that we do not find them in some of the boxes when we only open them 6 times a year! These nest records are just as important, as some of these boxes are not in close proximity to boxes with animals recorded in them. This shows that there are probably more Dormice in the area than we are finding, but they may not be using the boxes often enough for us to record them.

A further 21 animals were found in the research area that were big enough to microchip. (See Fig. 2) This is also up on last year. 3 were also chipped in the unthinned conifer woodland which surrounds the research area. Some of these boxes have been in situ since 1993, one of which was occupied for the first time this year! A further 15 boxes were erected in May and one of these boxes was occupied by 2 juveniles in October.

Although 67 animals were found in the research area in 2008, we know from micro-chipping that some of these were found on multiple occasions. From this information we know there were at least 34 different Dormice in the area, including 16 juveniles. This compares favourably with last year when at least 35 individuals were found in the same area, including 10 juveniles.

Fig. 1

	2003		2004		2005		2006		2007		2008	
	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests	Dormice	Fresh Nests
April									3	0	0	0
May	5	1	6	2	12	2	15	3	20	3	5	2
June	14	0	11	0	14	2	11	8	16	0	9	11
July	5	0	19	0	17	5	6	4	8	2	11	1
August	9	1	13	1	8	0	4	1	7	4	16	8
September	19	4	19	0	8	4	10	3	8	0	8	6
October	16	0	28	9	4	16	18	8	2	0	18	2
Totals	68	6	96	12	63	29	64	27	64	9	67	30

Fig. 2

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
1	4	0	3	1	0
2	7	4	12	5	11
3	13	3	9	4	2
4	8	3	0	0	2
Sausage	3	0	0	1	2
New plantation	Not surveyed	3	1	0	4
Unthinned area	2	0	0	0	3
Total	37	13	25	11	24

13 adult animals were recaptured from previous years, 5 adults and 16 juveniles were micro-chipped for the first time. (See Fig. 3) Two areas stand out for different reasons: Area with treatment 1 has had very few animals found in it since the felling of 2003/04. However, the area of treatment 2 has consistently been the most productive. As you will see from the descriptions of these treatments below, the only difference is that treatment 1 was carried out by 2 men with chainsaws with machine extraction and treatment 2 was carried out using heavy machinery for both operations. Has using chainsaws rather than large scale heavy machinery to carry out the operations made such a difference? I doubt it. It is true to say that during the operations the "footprint" using heavy machinery was less as the men with chainsaws covered more ground and therefore potentially caused more damage to hibernating Dormice. However, the areas have had 5 years to recover and it would make sense that by now animals would have moved back into both areas if they were favourable. They both look very similar to our eyes, but perhaps Dormice are looking for something a little different and the area of treatment 1 just hasn't got it!

We have now been micro-chipping for 7 years and have therefore followed some individuals for a number of years. (See Fig. 4) Last year we had two 4 year olds in the area, however this year one of these did not turn up in the boxes. However the other one was recorded just once, in August (No. 297567). The interesting point about this animal is that he has been recorded only 4 times since he was micro-chipped in 2004. He has only used 3 boxes during this time that we are aware of, which are within 100m of each other. This compares to one animal (No. 299781) who has been recorded 8 times since being micro-chipped in May 2006 and he has used 7 different boxes, travelling over 200m. One animal micro-chipped in May of this year was found every month, using 3 different boxes over 100m apart. These emerging insights into their behaviour seems to suggest that some animals have a preference for man made boxes, while others prefer more natural nesting sites. They also move reasonable distances, possibly related to food availability.

Fig. 3

Treatment No	Dormice found 2005	Recaptures	Dormice found 2006	Recaptures	Dormice found 2007	Recaptures	Dormice found 2008	Recaptures
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
Total	63	11	64	23	64	22	67	13

* Not surveyed prior to 2005

Fig. 4

Micro-Chip number	Date micro-chipped	Age when micro-chipped	Sex	Number of boxes used	Number of recaptures	Approximate age in 2008
297567	Oct-04	Mat	Male	3	4	5
299781	May-06	Mat	Male	8	8	3
302314	Oct-06	Mat	Male	2	4	3
294667	Oct-06	Juv	Female	1	3	2
296137	Oct-06	Juv	Female	2	1	2
517569	May-07	Mat	Male	2	3	2
448574	Jun-07	Mat	Male	3	2	2

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.

These treatments will be repeated in the autumn / winter of 2009/10.

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 13 years now. If we just look at these old boxes it gives a better idea of the population trends. 2008 has been a good year. Charts 1 and 2 show the number of Dormice found in October and throughout the year respectively. 2008 has been the best year since 2004 and the most encouraging factor is the number of young Dormice which were found. 69% of animals found were juveniles, which is the highest proportion since the project began and 44 is the second highest total count as well. Three areas of the forest where Dormice had not been recorded for a number of years yielded success:

Box 91 was occupied by 4 well grown juveniles in October for the first time since 2003 – 5 years ago!

Box 106 was occupied by a mother and young family in August for the first time since being erected in 1995 – 13 years ago! This box is adjacent to the downhill mountain bike course and I did not expect to find animals so close to such disturbance. However last year an empty nest was found in box 107, which is on one of the bends of the course! This is not the first time they have been recorded close to the track; in 2003 two adults and a Juvenile were found in a box on the same course. Despite my misgivings about this course, the Dormice seem to have become used to the bikes rushing past their resting place.

The other peculiar fact is that no other Dormice have been recorded within 400m of this area and most of it would be totally undisturbed – makes no sense!!

Box 285 was occupied by a well grown juvenile in October for the first time since 1997 – 11 years ago!

Much of this work could not have been accomplished without the assistance of our Forest Research

CHART 1 - OCTOBER OCCUPANCY BY DORMICE 1996 - 2008

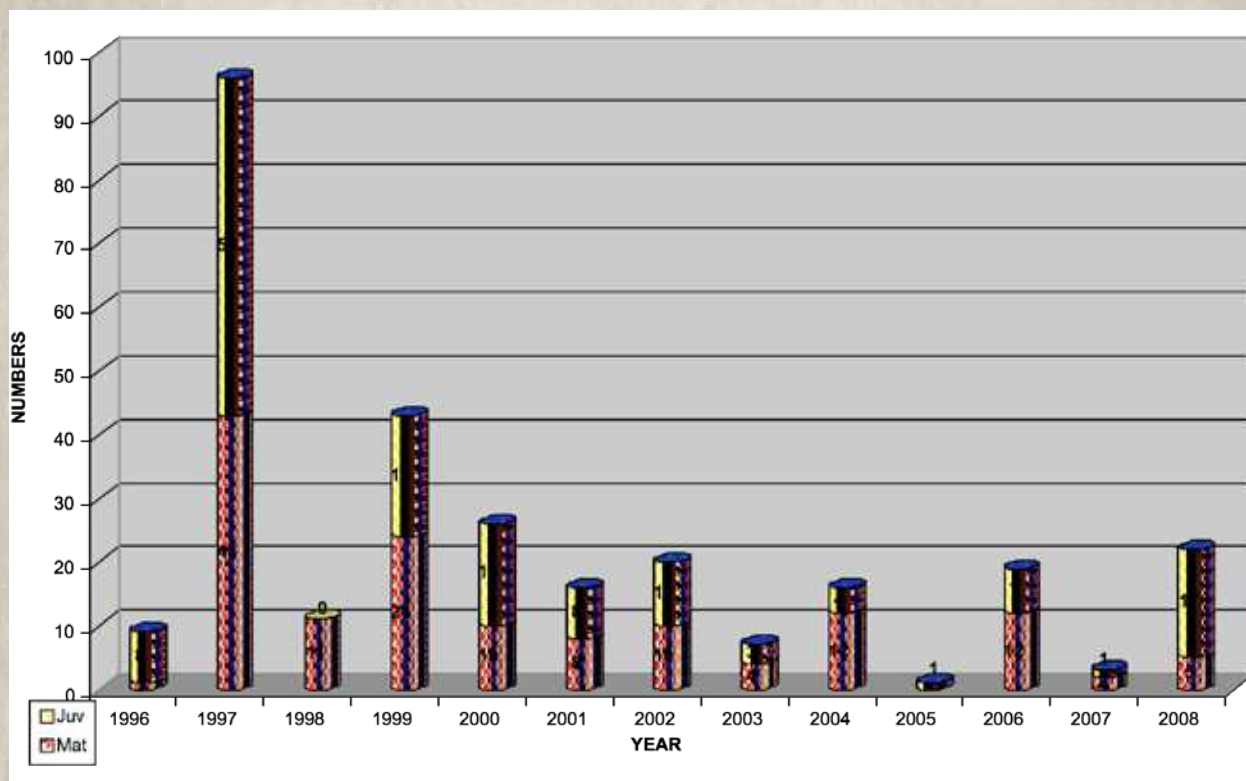
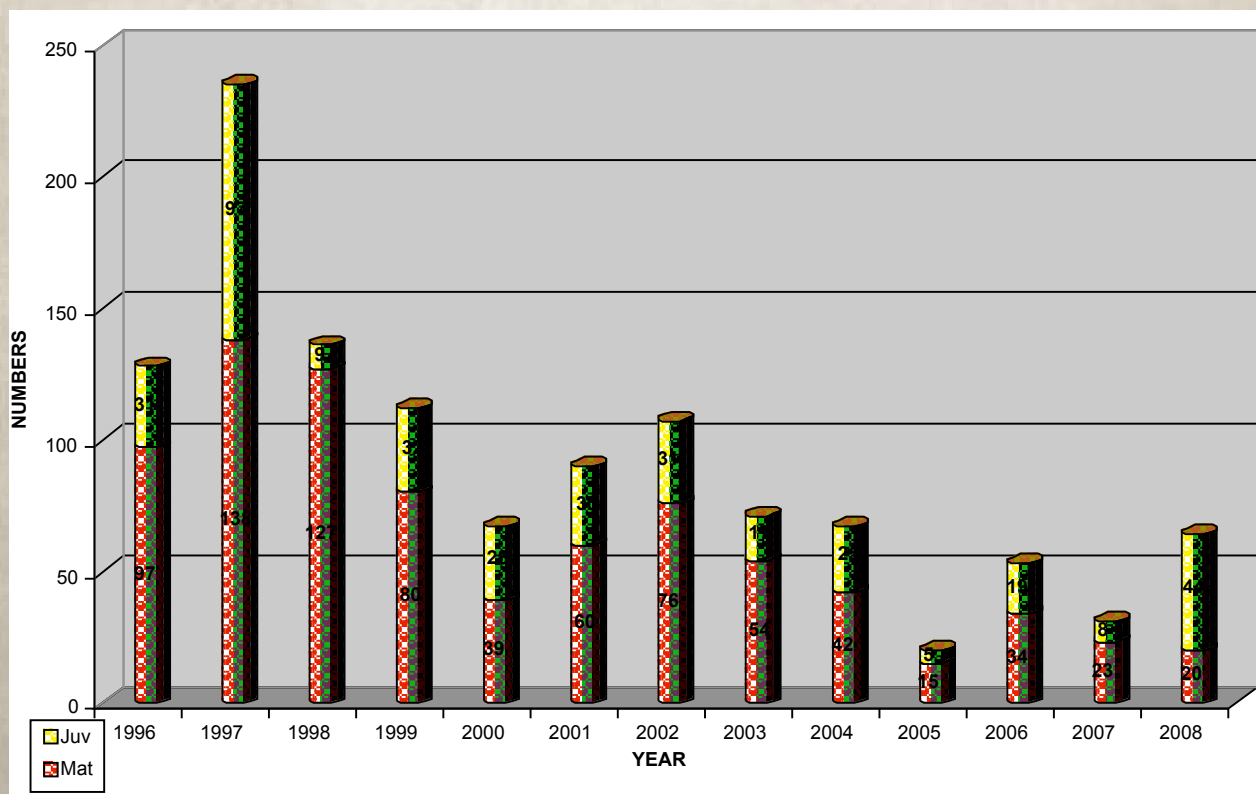


CHART 2 - TOTAL NUMBERS OF DORMICE FOUND IN BOXES 1996 - 2008



department. I would like to thank Roger Trout for his support over the last 8 years. I would also like to thank Liz Nether, who has spent her forth summer as a volunteer in Ribbesford. It is an onerous task checking over 350 boxes in this area every month from May to October and it could not be done without volunteers like Liz and many others over the last 8 years.

CONCLUSION

Overall 2008 has been a good year. The numbers found have been about average. However the most encouraging sign is the numbers of juveniles found in Ribbesford. If they have a good, cold winter and survive hibernation, maybe next year will see more records.

Dormice live in low densities and we will never find all animals in the area, no matter how many boxes we put out for them! It is an unknown factor what percentage we find, but by continuing to micro-chip we will know minimum numbers in the research area, which will give a better idea of their population dynamics and life history.

The Dormice in the research area of Ribbesford have one more year of peace before we repeat the operations of 2003/04. This will be the next chapter in the removal of the conifers the Dormice seem to have adapted so well to. The knowledge we are gaining from this work should be valuable in advising landowners across the country and beyond on how to remove alien species from woodlands with Dormice populations in them, without losing this endearing mammal.

WYRE FOREST RECORDS

The 60 boxes on Forestry Commission land in the mainblock of the Wyre Forest have still not had any signs of Dormice since 2002!

The only known site in Wyre Forest itself is towards the western end of Dowles Brook, recorded by David and Brenda Rea. This year has been the best yet! 12 Dormice boxes are now in this small area. These are checked just twice a year, June & October. One box was occupied with a Female in June and 5 animals were found in October, including 2 juveniles. These records again seem to show that it has been a good breeding year. A total of 5 fresh, empty nests were also found. This seems to mirror the Ribbesford results, although these boxes were checked even less!

Now I have taken many photos of Dormice over the years, but none have been as good or showed the ahh factor of Dormice better than Photo 1 below. This was taken by Brenda and my only claim to fame is that it is my hand!

Photo 1



In March as part of a joint operation between Forestry Commission volunteers and Butterfly Conservation, some deep bracken litter was cleared using rakes. One eagle eyed volunteer found a small round nest. (See photo 2) Much discussion ensued as to whether it was Dormouse or Harvest Mouse. However, as far as I am aware, there have been no recent records of Harvest Mice in Wyre Forest. Dormice have not been recorded in this area of the forest either. Therefore the find was significant and warranted further investigation.

The habitat surrounding the area was Conifer (Corsican Pine, planted in 1992). This is very similar habitat to that of Ribbesford when the population there was first found in 1994. I therefore decided to put up 20 boxes within the plantation to see if I could find these elusive animals. No signs of Dormice have been found so far in the boxes.

However, I was talking to one of the locals and mentioned this find. His reply was rather strange: "Oh yes, my dog has brought 2 Dormice back from the garden. He dropped one on the doorstep and the other I took off him after he found it amongst the grass" Now this was strange as I had not heard of dogs dropping mice on the doorstep – cats' maybe, but a dog? I would also not expect to find a Dormouse in amongst the grass – they are supposed to be arboreal! My reply to this was: "I would have liked to see these animals, how long ago did the dog find them?" "Oh, a few months ago now" he said "but they are still in the freezer!" Well, how many people would keep Dormice in the freezer?

Photo 2



Rosemary Winnall

I visited his house a few days later a little sceptical as the story seemed a little far fetched! However, to my great surprise he produced two plastic bags with a Dormouse in each! (See Photo 3) It turned out that the first one the dog found in the grass in May 2007 was a juvenile, which was very small and would not have been out of hibernation for long. The other was a large male which the dog had dug up in December 2008 from the garden somewhere during hibernation.

Now I have mixed feelings about this, as the dog has obviously got a nose for rooting out Dormice, which is not ideal to say the least.

Photo 3



Phil Rudlin

However the owner assures me that the dogs cannot get out of the garden without supervision, so at least any Dormice outside should be safe. Also this accidental finding is close to where this unidentified nest was found in March.

Therefore we know there are Dormice in this area of conifer. I will be putting some more boxes up in this area and hope to record their presence in the coming years. If we know they are there, we can then manage the woodland for them.



Spring in The Parks, 2nd May 2008

Rosemary Winnall