



Wyre Forest Study Group

DORMICE AND CONIFERS IN WYRE FOREST - 2002 UPDATE

Phil Rudlin

This is the second year of the long-term study into Dormice behaviour and survival in Planted Ancient Woodland Sites (PAWS) throughout the country. Forest Research (Forestry Commission) has funded various projects to increase our knowledge on this secretive rodent. They are continuing to focus on Ribbesford wood and the following projects are continuing:

- Droppings have been taken from boxes wherever possible and will be analysed to give an idea of their diet throughout the year.
- Radio tracking has taken place in August and October for the last two years to try to establish how far and where they travel to feed, where they nest during the day and to find hibernation sites.
- Fur clipping has continued to identify individuals in the short term, to find out movement within territories or any population expansion.
- A further 135 boxes were erected in the research area, so there are now 275 boxes within the 17ha which means that every 20m in all directions there is a box!
- Micro chipping has taken place to enable us to track individuals over their lifetime to establish survival rates, movements and interactions between animals.

The project is co-ordinated by Dr Roger Trout (Mammal Specialist at Woodland Ecology branch) Forest Research, who is licensed to handle Dormice, radio collar and microchip them. Most of the tracking this year has so far been carried out by Ruaraidh Milne, a research worker based at Alice Holt.

This year's radio tracking was far easier to organise as we had ironed out "most" of the complications. The methodology used was much the same, taking bearings from two fixed points to establish the location and movements of each mouse during the night. These locations were then transferred onto a large-scale map to show the approximate movements of each mouse within the area. Last years results indicated that they seemed to range over about 1ha and although this year's results have not been fully analysed it seems that this home range will be very similar.

Dormice are not thought to cross large open rides such as those that surround the study site. It was therefore a surprise to find a signal coming from

the other side of this track early one August evening. The signal seemed to be emanating from a large Beech tree close to the edge. However the signal seemed to be stable which meant that the animal was not moving. Was it enjoying a feast? Or more sinisterly, was it an Owl's breakfast? Later that night to everyone's relief the signal was coming from the research area again and the following day the mouse was tucked up safely in his box! That same day another mouse was found and collared in the same box. Both these mice were then found to cross regularly over this ride. (6 nights out of 11).

On closer inspection some of the trees on the edge of the track were found to be connected to the other side, creating an arboreal link between the two. Were they using these few branches or would they cross the open ride? For the last four nights of the tracking these branches were tied back to prevent arboreal access. Neither mouse crossed the ride during this period. This unfortunately doesn't prove anything as they had not crossed for the previous 2 nights with the branches still connected and the period was not long enough to give any positive results.

One other mouse did seem to cross over in another area where there were no such connections, again in August. The signal came from a large patch of Bracken opposite one of the animal's regular day nests. The signal continued to come from the same area for four days before the battery ran out. Again this proves nothing. The animal may well have been tucked in safely. It was unfortunately after the night time work had been completed so we could not tell if it was moving during the darkness and returning or whether it had been predated and the collar lost!

The daytime work mirrored the findings from last year. Dormice were utilising a range of nesting sites, including:

- Birds' nests
- Squirrel dreys
- Bramble patches
- Heather
- Conifer needle cascades

These first two years of data from radio tracking has been only the beginning. This coming year (2003) will mark the next step in the attempt to learn how different thinning practices effect localised populations of Dormice in Ribbesford.



Wyre Forest Study Group

The main aims of the project are:

- To devise various methods of thinning conifers to sustain the local population of Dormice.
- To examine whether one or a variety of management options in conifers may be used, and practice relevant mitigation techniques to achieve continued populations.
- To provide evidence of the food supply available in conifers and how/when it is utilised by Dormice.
- To provide best practice guidance notes to the forest industry and conservation bodies.

The following work will be undertaken:

- 1) Microchip as many individual animals as possible.
- 2) Divide the 17ha area into four sections and undertake three individual thinning regimes:
 - Mechanised thinning, using a harvester and forwarder to clear every seventh row for access and extraction. Thin the entire section to c. 30-35% according to standard thinning tables.
 - Group felling of c. 25-30m diameter areas. Where possible expanding on existing failed areas. Minimal use of racks for access and extraction.
 - Ringbarking by chainsaw to c. 35% level favouring existing broadleaves. No removal of timber therefore no racks required.
 - Leave unthinned.
- 3) Assess the short and long term impact on the Dormice by continued box data and radio tracking.

- 4) Compare the levels of canopy and vegetation regrowth to the Dormouse population.
- 5) Compare dropping content with insects available in conifers using field-sampling techniques.

2002 Records

All boxes were checked each month between May and October along with the existing 300. Dormice have now been found in boxes deep into the centre of the conifer plantation. There does, however seem to be a preference for nest sites close to open areas within the plantation, usually caused by the failure of the conifer crop. This would indicate that the edge habitat is very important and that the method of group felling maybe effective!

This year the spring and summer counts were again higher than average. It has also been a good breeding year with good numbers of young found in both July and August (9 and 11 respectively) However only 1 was found in September and 10 in October.

Fig.1 shows the annual October comparisons and Fig.2 gives the total number of Dormice found in the boxes since 1996 (these are not individuals but totals from each month added together. For instance 107 were counted in total this year but only 74 individuals identified - 29 adult males, 14 adult females and 31 juveniles.)

Wyre Forest mainblock has, again, been disappointing. No Dormice were found along the Dowles brook or Parkhouse areas. The last sign of presence in these boxes was a single mouse in June 1999. The only Dormouse found again this year was in a box on Wimperhill, within conifer. Only one box has been occupied but with the same female in residence three out of four visits.

Fig. 1 October Occupancy by Dormic

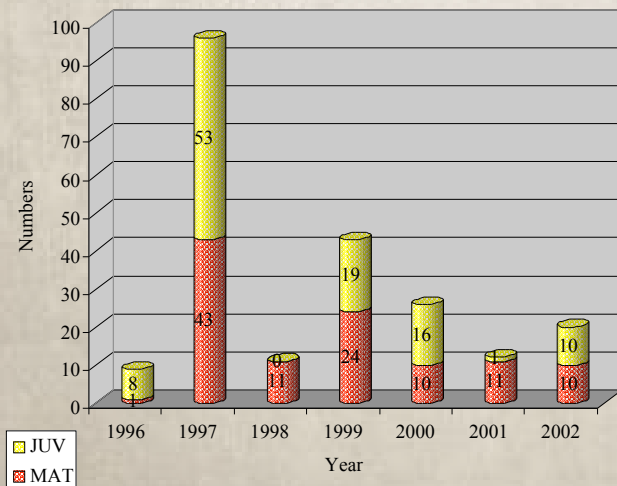


Fig. 2 Total Number of Dormice found in Boxes

