Notes:

The 52 dormouse boxes were once again checked for any signs of use. Nineteen boxes were empty, 17 contained old bird's nests, 10 showed signs of use by woodmice (nesting materials and nibbled acorns, nuts or ash keys), five contained invertebrates (including one wasps' nest) and one box had been destroyed by a fallen tree. Yet again there were no signs of dormice!

LONG TERM STUDY OF THE AGROFORESTRY SITE AT LEEDS UNIVERSITY FARM NEAR TADCASTER.

Background Information:

Agroforestry is an experimental system of farming which combines forestry production hedges interspersed with arable strips. It has been designed as an alternative use of agricultural land to counter temporary surpluses. However, it also offers a number of possible benefits in relation to environmental issues and resource shortages, which may later prove to be of great importance. These include:

1 Reduction of demand for chemical pest and disease control due to increased ecological diversity.

2 Increased total production of dry matter per unit area due to complimentary effects.

3 Protection of topsoil from wind and water erosion.

4 Production of food (nuts) from woody species more likely than herbacious crops to be proof against the droughts that the greenhouse effect may bring.

5 Reduction of windspeeds by breakup of "fetch" effects over large areas - something that could also be directly relevant to the possible consequences of the greenhouse effect.

6 Recycling of nutrients due to interception by tree roots which, apart from its resource implications, would be relevant to the protection of aquifers if nitrates are intercepted.

7 Increased rural employment (especially in the slack season).

8 Vastly improved amenity value.

The agroforestry treatment areas at Leeds University Experimental Farm consist of production hedges containing timber trees with an intermediate storey of hazel bushes. These are interspersed with arable strips 12m wide which are being cropped with a rotation of combinable crops. The site was planted in spring 1988 and, during 1990, grass was sown in the 2m production hedge strips.

Abutting onto the agroforestry treatment areas are forestry control plots, and surrounding the whole is a windbreak hedge.

The above planting is replicated four times. Near to each - but far enough to minimise microclimatic interactions - are areas of arable control treatment.

The site is being monitored to compare arable yields, tree growth, microclimatic and soil moisture measurements in the experimental and control treatments. Extensive micro and macrofaunal monitoring is also underway and the YMG will be participating in small mammal studies over a long term period.

INITIAL TRAP, 27/4/91

Participants:

Kate Fuller
Anne Hanson
Lesley Helliwell
Jenetta Lambert
Dick Wakelin
Chris Wright (coordinator of faunal monitoring)
Mary Youngman

Notes:

The object of the trap was to compare small mammal use of the experimental and control treatments. We hope to investigate how this changes in the future as the site becomes more established.

Traps were laid in two treatment blocks, with eight traps (4 x 2) in hedges, eight traps (4 x 2) in arable strips, eight traps in forestry control and eight in arable control in each block.

Traps were also laid in nearby woodland, hedgerows and shelter belt to ascertain which small mammal species were present in the area.

The traps were set on Friday and Saturday evenings and taken up on Saturday and Sunday mornings.