

Treswell Wood

Nestbox Report -1979

The main aims of the nest box scheme in Treswell Wood are conservation, scientific investigation and increasing public interest and involvement in the wood. The results of the first season show success in all of these areas. I wish to thank all of those who have been involved and helped in any way.

Conservation

The wood is short of natural sites for hole nesting birds and the boxes are aimed at providing more nest sites providing more nest sites for tits, Wren and Treecreeper and also to attract new hole nesting species such as Redstart. Although boxes are only erected in about a quarter of the wood area, this year's ringing has shown that $40\% \pm 10\%$ of Blue Tit and $55\% \pm 20\%$ of Great Tit juveniles in the wood up to September were raised in nest boxes. This demonstrates the value of boxes, although the full impact cannot be assessed until population patterns have returned to normal after last winter. This may take a few years.

So far no new species of the bird have been attracted to the wood, but the pair of Stock Doves which nested in one box did provide the first two Stock Doves to be ringed in the woods. Other highlights of this year were the three broods of Spotted Flycatchers. All nested successfully in the 'protected open front' boxes.

The boxes failed to attract any Wrens, Treecreepers, owls or Kestrels. In the case of Wrens, this failure is almost certainly connected with the severe fall in population over the winter. Trent Valley Bird Watchers estimate that the Nottinghamshire Wren population was reduced by 90%. Treswell Wood ringing data confirm that the population was severely reduced. (Fig.1).

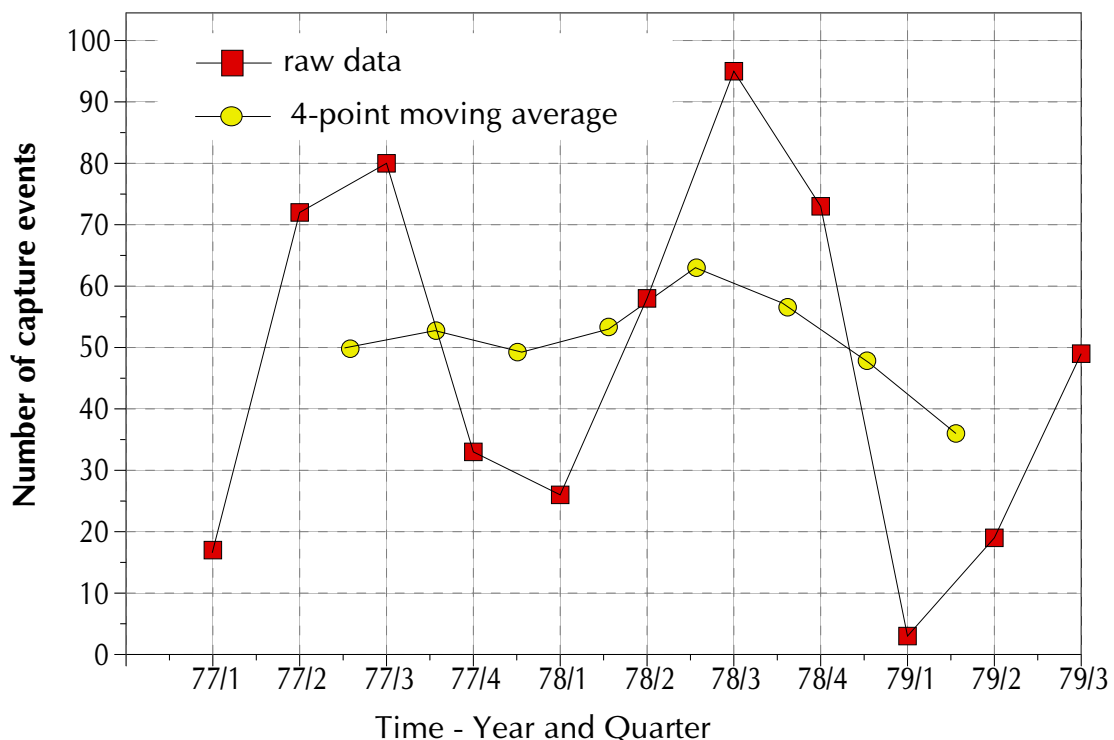
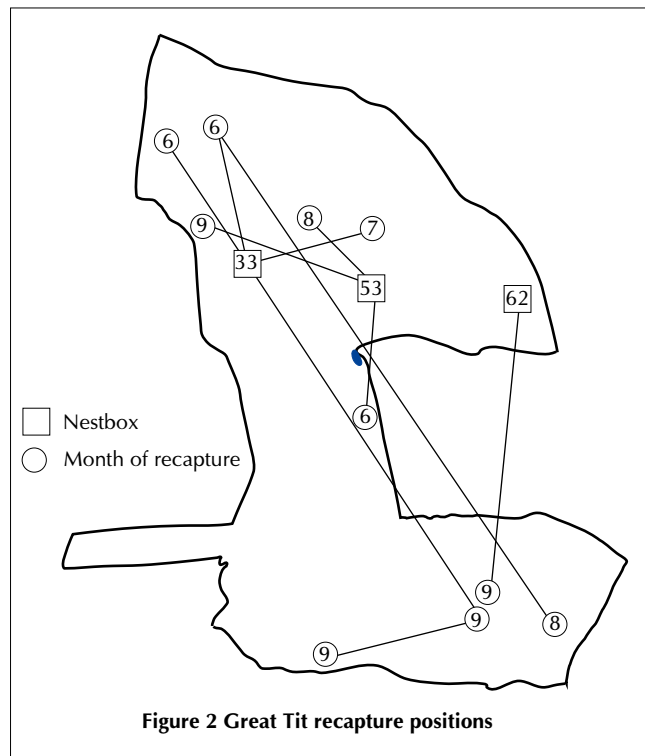


Figure 1 - Wren Captures in Treswell Wood 1977 - 1979

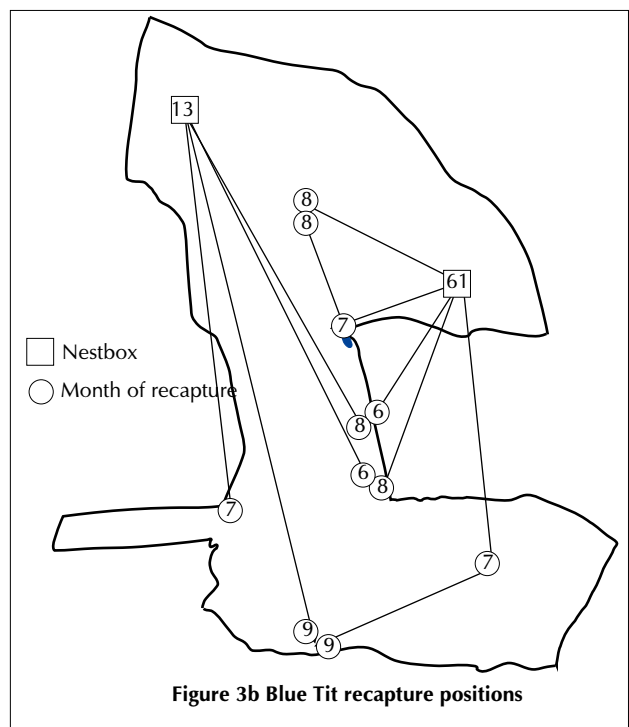
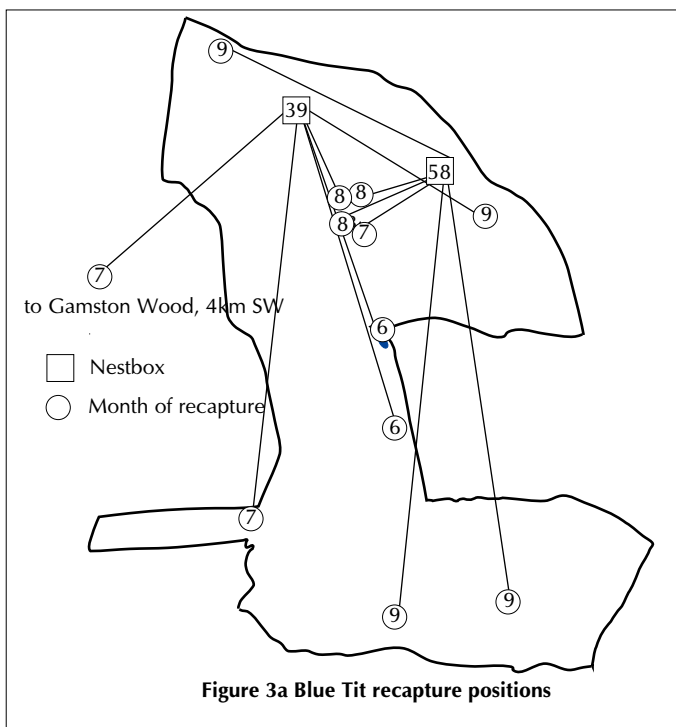
Woodland is the preferred habitat for Wren and the population recovery in woodland after severe weather is largely caused by recolonisation from outside. Again ringing has shown that the majority of adult Wrens captured since the winter have been newcomers to the wood.

Scientific investigation

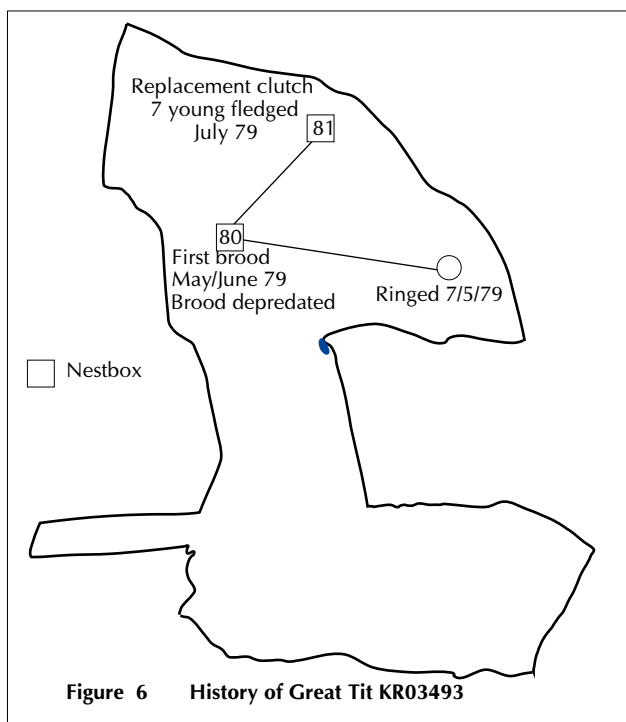
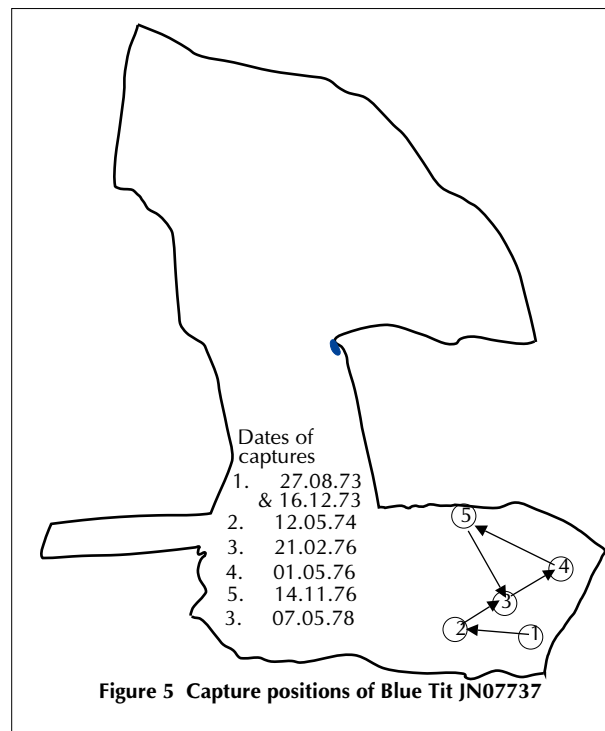
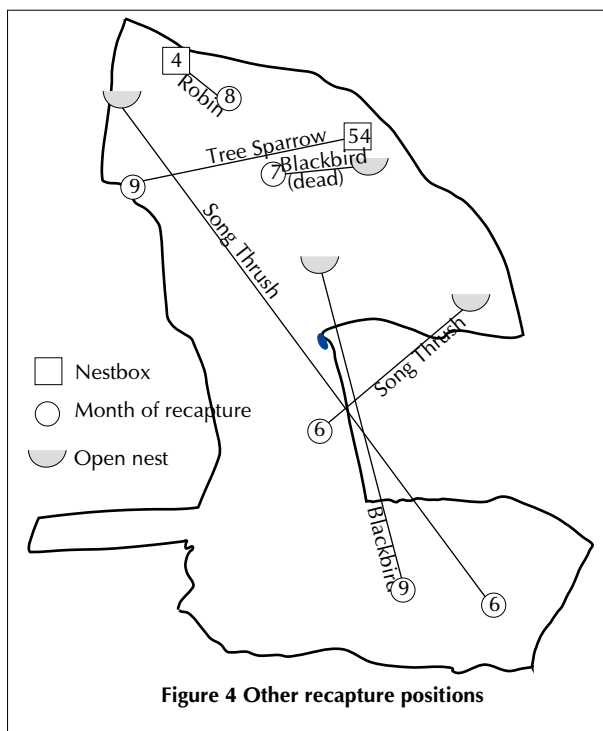


The bird life of the wood is intensively studied with ringing, Common Bird Census and Winter Transect Counts. The nest boxes have been used to extend the range of these studies. Each brood has also been recorded for the BTO Nest Records Scheme, the nestlings are all ringed and details of nest locations are passed to the CBC.

One of the areas of study using ringing data is that of bird movements in the wood. Nestling ringing is especially useful here - the starting point of each bird's life is known for certain. Generally juveniles of most woodland species tend to wander for some months after fledging, before settling down to a territory during the winter. Thereafter movements tend to be confined to a small area. Figures 2, 3 and 4 show some of the movements of birds from boxes. It is yet too early to draw any conclusion from these movements as the juveniles are still on the move. Contrast these figures with Figure 5 which records the history of an adult Blue Tit. So far we have reports of two birds found outside the wood. (Table 5)



Nest boxes and ringing together allow detailed histories of individual birds to be followed, although often as in the case below, more questions are raised than are answered. Figure 6 shows some details of a Great Tit. It first attempted to nest in a box in which a Coal Tit had been killed on a half completed nest. A brood of twelve was hatched, but all were killed when half grown. The Great Tit then moved to another box where it raised a late, successful brood. The original box was later used successfully by a Tree Sparrow which could well have been responsible for the failed nests.



Another fruitful area of study is that of nestling survival. Normally, for tits, the first month after fledging is a time of very high mortality. After that, juveniles have almost as good a survival rate as adults - around 40% per year. (see *British Tits* by C. Perrins). At least 48 out of 158 of the Blue and Great Tits which fledged from their boxes have survived their first month. This high figure is probably connected with low adult populations. Tree Sparrows are not so easy to study because they are not true woodland species. Juveniles generally seem to leave the wood on fledging to be followed by their parents after the last (usually third) brood. Tree Sparrow captures often take place on farmland adjacent to the wood, or at the Pheasant feeders in winter, although more breeding Tree Sparrows have been captured in the wood this year than is normal.

An unexpected but welcome use for old nests from boxes is as a source of bird fleas. Malcolm Greenwood at Loughborough University is studying these and in return for a large supply of old nests has agreed to identify as many species of invertebrates as he can from them. In due course he will send his report to us. This arrangement is of benefit to all concerned and has already provided a valuable record. This is of *Gnathoncus buyssoni*, a beetle of the family *Histeridae*. It is a predator of larvae and is found in squirrel dreys, nests and some fungi. The specimens which hatched from a Treswell Wood Tree Sparrow nest have been identified at the Natural History Museum in London. They provide the first record of this species, not only for Nottinghamshire, but also for the Midlands. Previous records have been from the south east, Berkshire and Norfolk. This is a very pleasing first for Treswell Wood and its nest boxes.

General Interest

Very often we are disappointed when our Blue Tit or Blackbird in the garden fails in a nesting attempt. However, in the wild, nest failure can be the rule rather than the exception. Table 2 will perhaps put

garden failures into perspective. It must be noted that, for the first four species, failures which occurred before egg laying are not included for various reasons - species not identified for example. Thus the true failure rate will be greater than that given. Table 3 gives details of clutch and brood sizes, the bracketed figures indicate clutches which failed to be completed. Table 4 list the numbers of boxes used this year. Fortunately there have been no cases of vandalism this year, other than the unwelcome attentions of grey squirrel to at least three boxes.

The Future

With the present sponsorship conditions and detailed recording of nesting activity, manpower is stretched to the limit. The wood still has plenty of space for more boxes and so the scheme will remain open to new sponsors. All new sponsors will receive the annual report together with details of their box, but these details will not be as full as those given this year.

Table 1 Nestlings ringed in Treswell Wood, 1979

| Species | Nestlings ringed | Successful broods | Nestlings died after ringing | Birds retrapped or recovered |
|--------------------|------------------|-------------------|------------------------------|------------------------------|
| Stock Dove | 2 | 1 | - | - |
| Swallow | 6 | 2 | - | - |
| Robin | 7 | 2 | 1 | 1 |
| Blackbird | 16 | 5 | 2 | 2 |
| Song Thrush | 33 | 8 | - | 1 |
| Blackcap | 1 | 1 | - | - |
| Spotted Flycatcher | 13 | 3 | 1 | - |
| Blue Tit | 112 | 12 | 11 | 41 |
| Great Tit | 65 | 7 | - | 18 |
| Starling | 1 | - | - | - |
| House Sparrow | 11 | 3 | - | - |
| Tree Sparrow | 118 | 32 | 2 | 1 |
| Totals | 385 | 76 | 17 | 63 |

Italic numbers refer to nests not in sponsored boxes. Retrap figures correct to 30/9/79.

Table 2 Unsuccessful Broods

| Species | No. of broods | % failures | Causes of failure if known |
|-------------|---------------|------------|------------------------------|
| Blackbird | 6 | 55 | Grey squirrel suspected |
| Song Thrush | 8 | 50 | Grey squirrel suspected |
| Coal Tit | 1 | - | Tree Sparrow? |
| Blue Tit | 3 | 20 | 1 Great Tit, 1 Tree Sparrow? |
| Great Tit | 3 | 30 | 2 Tree Sparrow? |
| Starling | 3 | - | Grey Squirrel |

% failure rate is not given where there are only small numbers of nesting attempts.

Table 3 - Clutch and brood sizes.

| Species | Clutch size | | | Numbers Fledging | | |
|--------------------|-------------|-----|-----|------------------|-----|-----|
| | Mean | Max | Min | Mean | Max | Min |
| Stock Dove | 2.0 | 2 | 2 | 2.0 | 2 | 2 |
| Robin | 4.5 | 5 | 4 | 3.0 | 3 | 3 |
| Spotted Flycatcher | 4.3 | 5 | 4 | 4.0 | 4 | 4 |
| Blue Tit | 8.1 | 15 | (1) | 7.5 | 15 | 0 |
| Great Tit | 8.2 | 13 | (1) | 6.5 | 11 | 0 |
| House Sparrow | 4.8 | 6 | 4 | 2.8 | 4 | 0 |
| Tree Sparrow | 4.6 | 6 | 2 | 3.3 | 6 | 0 |

Table 4 Types of box used

| Type | Number in wood | Number used for nesting | Number used for roosting only |
|------------|----------------|-------------------------|-------------------------------|
| Chimney | 1 | - | 1 Tawny Owl |
| Open large | 2 | 1 | - |
| Open small | 18 | 5 | 1 Robin? |
| Hole large | 4 | 3 | 1 Grey squirrel? |
| Hole small | 50 | 36 | 2 T. Sparrow |
| Wedge | 10 | 4 | - but none by Treecreepers |

Table 5 Birds reported away from Treswell wood (to 30/9/79)

| | | | | | |
|----------|----------|--------|---------|-----------------|--------------|
| KR 03517 | Blue Tit | Box 39 | 31/5/79 | trapped 28/7/79 | Gamston Wood |
| KR 03595 | Blue Tit | Box 77 | 13/6/79 | trapped 13/9/79 | Clarborough |

Acknowledgements

Thanks are due to:

- Paul Partridge at Eaton Hall who arranged for the printing of my original (badly) typewritten document.
- Philip Wain who did the hard work of transcribing the original document to desk-top publisher and redrawing the maps.

This edition has been corrected but the text content is otherwise unchanged. The original document front cover held hand-drawn sketches of the types of box used and was printed under the name of Nottinghamshire Trust for Nature Conservation. It was distributed to various trust officials, members of the Treswell Wood Management Committee, sponsors of nestboxes, ringers and CBC recorders in the Treswell Wood.

This version was prepared using Techwriter on an Acorn RISC OS computer and exported as an Adobe Acrobat file.

Chris du Feu, February 2000