

Treswell Wood

Nestbox Report - 1986

Introduction

As in the past two years, this report includes notes on events in both Treswell Wood and Gamston Wood nestboxes. In addition there are some notes from other local nestboxes. Some boxes remain in the Claborough reserve but we still lack a nestbox inspector. Volunteers welcome. Table 1 lists details of events in Treswell and Gamston Woods. Treswell Wood now holds 100 boxes and Gamston Wood 50.

Table 1a Gamston Wood nestboxes 1986

Species	Broods	Young Ringed
Tawny Owl	1	0
Blue Tit	8	74
Great Tit	5	46

Table 1b Treswell Wood nestboxes 1986

Species	Failed Nests	Successful Nests	Young Fledged	Recaptured (to 20.10.86)
Tawny Owl	1	1	2	1
Wren	0	3	16	2
Spotted Flycatcher	2	0	0	-
Blue Tit	2	26	233	18
Great Tit	8	14	126	2

1986 must go down as one of the latest ever seasons - not only for the birds - but also for gardeners and others (even a frantic biology teacher fearing the white dead nettle *Lamium album* would not bloom in time for the A level practical exam). The lateness was caused by the long and wet spring. However, once this ended the spell of dry, fine weather in this area made up for it. The season was very short for the birds - they were under pressure to raise young as early as possible and so, once the weather was suitable, all the birds began nesting almost simultaneously. In a normal year the main tit laying season extends over 15-20 days, this year it lasted only 10.

Success in woodland nestboxes has been very high but in garden boxes it was common to find several of the brood nearly full grown but dead. Possibly lack of mature trees in gardens may have limited food supply in a very difficult season. Treswell Wood boxes enjoyed a very low predation rate. Last year food was generally in short supply, but this year the hard winter and spring may have reduced predator populations as well. The brief season will have given predators very little time to learn or re-learn the nestbox habit. Of the three depredated tit boxes in Treswell Wood, two were very late. Perhaps both of these were taken by a predator who had only just discovered nestboxes as a food source.

Species Notes

Tawny Owl

Treswell Wood held two clutches. The later one had one young which was sadly eaten by a grey squirrel *Sciurus carolinensis*. The other nest, which raised two young successfully, held remains of a number of prey items. Details of the two birds whose rings were recovered are given in Table 2. Perhaps the most pleasing prey item found was the hind paw of a grey squirrel. For the first time an owl box was used in Gamston Wood although the one egg laid was later deserted. It is probable that the more open conditions resulting from the management program have made the wood more attractive to these owls.

Table 2 Bird rings in Tawny Owl nest. June 1986, Treswell Wood.

Ring	Species	Sex	Ringing date	Last Recapture	Age at death
B250459	Blue Tit	Male	8 Oct 1983	6 Apr 1986	at least 4 yrs
B841760	Chaffinch	Female	10 Jun 1984	4 Nov 1984	3 yrs

Stock Dove

At last - success in my garden. A pair used the box after ignoring it for three years. I like to think it was because of the addition of a landing platform outside the entrance, (as tentatively advised in the BTO Nestbox Guide) but it may have been because of better siting. Four clutches were laid, possibly not all by the same pair of birds. Three of these clutches produced young.

Wren

Treswell Wood held several Wren nests in boxes. Of these, the early ones were destroyed by predators. Only the three late ones were successful. Two were in the slit-entrance boxes described last year. The third was in a conventional tit box and only discovered after the young had fledged. This particular box (88) had been selected by a Blue Tit but wasps had taken over as the tit nest was being built. I gave the box a wide berth for the next few weeks only to discover later that Wrens had taken over the box and even used the wasp nest material for building their own nest. Presumably the wasps abandoned the nest rather than being driven out by Wrens.

Coal Tit

A sad lapse for both Treswell Wood and Gamston Wood, although one brood was found in a box at Ranby. This lapse is very puzzling, for in Gamston Wood which is good Coal Tit habitat, singing males were present throughout the season and some nested in natural sites. This is the first year that Coal Tits have not used Gamston Wood nestboxes. In Treswell Wood Coal Tits were plentiful until late into the spring but none nested in boxes although they have used woodpecker boxes for roosting. For roosting, they excavated small cavities in the polystyrene packing just inside of the entrance in all the three boxes in the wood. (A pity that woodpeckers have not yet learnt to use these boxes.)

Blue Tit

Treswell Wood Blue Tits enjoyed a very low predation rate and this more than compensated for the effects of the weather. The average number of eggs per clutch was fairly low - 9½ in Treswell Wood, about 8 in the surrounding countryside and fewer in gardens. Table 3 shows the relatively high average number fledged per brood. There were some very late nests recorded. One, started on 31st May in Treswell Wood was probably a replacement clutch for an earlier failed nest. Another, in Ranby, was certainly a replacement clutch - the female (ringed in Retford in the previous winter) lost a brood of 10, week-old nestlings to a weasel *Mustela nivalis* but re-nested in a nearby box and reared six young. Treswell Wood boxes in newly coppiced areas have been placed at ground level in order to conceal them from vandals. These were used successfully by Blue Tits which did manage to find them. Vandals did not, and by the end of the season I, too, found it hard enough to find them hidden amongst the 2 metre tall undergrowth.

Table 3 Average numbers of young fledged per brood, Treswell Wood 1979 - 1986

Species	1979	1980	1981	1982	1983	1984	1985	1986
Blue Tit	8.4	10.0	8.3	9.0	8.4	8.2	7.6	8.7
Great Tit	9.3	7.6	8.0	10.0	6.6	7.6	6.9	8.9

Note: 1983 figures were reduced because of vandal attacks. Numbers are averages per successful brood.

Table 4 Great Tits, Nests and Nestlings, Treswell Wood 1979 - 1986

Year	1979	1980	1981	1982	1983	1984	1985	1986
Nesting attempts	10	8	16	6	24	14	24	18
Young Fledged	65	53	56	50	48	61	104	126

Note: these figures include all nesting attempts - successful and failed.

Great Tit

Another record year in Treswell Wood. Table 4 shows the spectacular increase over the last two years. Success rate per nest was very high thanks to lack of predation, amongst other things. Treswell Wood held a most pleasing nest. On the day of ringing the young, an adult Great Tit was mist netted fairly near the nest. It was presumed to be the male parent of the nest and was NH49544, ringed as a nestling seven years previously in a box only 50 metres away.

Nuthatch

A frustrating year for the Treswell Wood nestboxer. There were three boxes, all ideally suited for Nuthatch, high up in trees, exactly as advised in the BTO Nestbox Guide. These were all taken by Great Tits - causing far too much ladder work. However there was for the first time confirmed breeding in the wood by a pair using an old woodpecker nest. The hole was very low, almost within reach from the ground - not as advised in the book. Even more insulting, another pair bred in a box in Eaton village. This box was a second hand Treswell Wood reject box and placed on a sycamore *Acer pseudoplatanus* only 1.5 metres above the ground. Next year my boxes will be set much lower.

Spotted Flycatcher

Two attempts in Treswell Wood. One was depredated, the other abandoned during building. Boxes in gardens were more successful, away from grey squirrel attack. One, in East Drayton, was used twice in quick succession by different pairs of birds.

Robin

One attempt in a slit entrance box in Treswell Wood. It was abandoned during egg laying.

Birds' Responses to the Late Season

It is important for tits to time nests correctly. Nests too early, or too late, will miss the abundant caterpillar crop which is essential for feeding the young. Nesting too late will also allow less time for young to become independent and gain familiarity with the area. Late fledging birds can be forced to disperse more widely because of pressures from more established earlier fledging birds. The very late start to the season is clearly shown in Table 5. In this table the first egg date of a nest is the date on which the first egg is laid in it and is a measure of the earliness of the nest. The start of season is the earliest first egg date. Treswell Wood Blue Tits were two weeks later than the average for the previous seven years and nearly three weeks later than in the earliest year of 1981. Great Tits were 10 days later than average.

There are various strategies available to lessen the effects of late nests. One is to lay fewer eggs thereby starting incubation 1 day earlier for each egg not produced. A second method is to reduce incubation time, perhaps by sitting tighter on the eggs? Thirdly, the time to fledging can be reduced by feeding the young more.

Table 5 First egg dates, Treswell Wood, 1979 - 1986

Year	1979	1980	1981	1982	1983	1984	1985	1986
Blue Tit								
Earliest	17 Apr	15 Apr	14 Apr	20 Apr	25 Apr	27 Apr	22 Apr	4 May
Median	29 Apr	23 Apr	20 Apr	24 Apr	6 May	2 May	30 Apr	8 May
Great Tit								
Earliest	2 May	20 Apr	21 Apr	24 Apr	28 Apr	30 Apr	25 Apr	6 May
Median	7 May	3 May	4 May	27 Apr	5 May	5 May	4 May	12 May

Treswell Wood Blue Tits adopted the first and third methods. Their mean clutch size was the third lowest recorded since 1979 and there were no very large clutches. It is not easy to calculate the time from hatching to fledging since that requires a visit on several successive days and is impossible to arrange (except perhaps for a full time ornithologist). However in both Gamston Wood and Treswell Wood we had the impression that Blue Tits were growing faster than usual. Sometimes we would visit expecting to find ugly, reptilian creatures, only to discover a nest of very active well feathered young Blue Tits. Increased growth rate may be a natural result of smaller clutches since each young will receive a larger proportion of the available food. Incubation time for Blue Tits was normal.

Great Tits, on the other hand, adopted the second strategy. The mean clutch size in Treswell Wood was in fact larger than usual but incubation time was reduced to a mean of 12½ rather than 14 days. The shortest incubation time was only 10 days. In addition, later Great Tit nests tended to have shorter incubation times. The mechanism by which this time was reduced is not clear. It is possible that the birds could have started incubation before completing laying. However, this would have led to the last eggs hatching some days later than the earlier ones and so some of the young would have been much smaller than the others. We did not notice any such small birds, neither was there high mortality which is usual with small members of broods.

Another result of the lateness of the season was its briefness. The laying season of both Great and Blue Tits was significantly shorter than usual. There was almost no opportunity for replacement clutches if the first attempt failed. Birds which failed generally gave up, rather than trying for a hopelessly late brood.

Birds from Previous Years

We continue to capture nestlings from previous years. The apparent survival rate of last years nestlings was not as high as expected in spite of the low populations mentioned in last year's report. Details of Treswell Wood birds are given in Table 6.

Table 6 Numbers of Birds ringed in boxes then recaptured, Treswell Wood 1979 - 1985

Species		1979	1980	1981	1982	1983	1984	1985	1986
Wren	N	0	10	0	0	4	33	6	16
	R	.	1	.	.	1	5	0	2
	P	.	10%	.	.	25%	15%	0%	13%
	E	.	0	.	.	0	0	0	.
Blue Tit	N	101	240	231	171	117	155	189	233
	R	63	91	81	56	28	43	47	18
	P	62%	38%	35%	33%	24%	28%	25%	8%
	E	0	1	2	3	3	0	21	.
Great Tit	N	65	53	56	50	48	61	104	126
	R	34	10	10	10	13	19	17	2
	P	52%	19%	18%	20%	27%	31%	16%	2%
	E	0	0	0	0	0	1	8	.

Note. N nestlings ringed and fledged
 R recaptured and/or recovered
 P recaptured and/or recovered as % of total
 E first recaptured during the last year.

Other Inhabitants

Several species other than birds have been recorded in our nestboxes. The list of species identified so far in Treswell Wood is given in Table 7. The list also gives some indication of why they come into nestboxes. The list is far from complete. There are as yet many species found but not identified including various spiders, centipedes, flies, beetles and moths. Many individuals found are casual visitors, only using boxes for hiding in the same way as they might use crevices in tree bark.

Table 7 Animals species recorded in Treswell Wood Nestboxes, 1979 - 1986

Species	English Name	Status in boxes and Notes
<i>Forficula auricularia</i>	Earwig	Common & numerous
<i>Acanthosoma haemorrhoidale</i>	Hawthorn Bug	One record
<i>Dasypsyllus gallinulae</i>	Bird flea	Common; parasites of birds. Lives on nest detritus
<i>Ceratophyllus gallinae</i>	Bird flea	as above
<i>Xylophasia monoglypha</i>	Noctuid Moth	Frequent
<i>Bombus hortorum</i>	Bumble Bee	Uses tit nests for its own
<i>Necrophorus vespilloides</i>	Sexton beetle	Regular in boxes with dead young
<i>Gnathoncus buyssoni</i>	Beetle	Predator of invertebrate larvae, very rarely recorded in UK
<i>Melanotus rufipes</i>	Click beetle	One record
<i>Thanasimus formicarius</i>	Beetle	Predator of bark beetle larvae
<i>Barynotus obscurus</i>	Weevil	One record caught in spider's web
<i>Porcellio scaber</i>	Woodlouse	Common in small numbers per box
<i>Limax maximus</i>	Slug	Casual; only one ever found
<i>Lehmannia marginata</i>	Tree Slug	Common in Treswell Wood but generally uncommon in the dry East Midlands
<i>Sciurus carolinensis</i>	Grey Squirrel	Predator and unwelcome box user
<i>Apodemus sylvaticus</i>	Wood Mouse	Predator and box user

Bees have again used Treswell Wood boxes and they have also started using them in Gamston Wood. I think they evict birds from a partially complete nest although the evidence for this is not conclusive yet. The two

boxes in Treswell Wood had held tits and were abandoned, but it was two weeks before the bees were found. A garden box, under daily observation, was used by a Great Tit which laid some eggs before a bee moved in. I evicted the bee. The Great Tit, which I now presume was driven off by the bee, never returned and the box was then used successfully by a Blue Tit.

Bat Boxes - Notes from Tom Moffat

Over the last year the Trust has supplied bat boxes to a variety of enterprising people who would now not be without these fascinating conversation (or conservation?) pieces. Unfortunately up to now I cannot confirm occupation of any box by a bat. This should not deter anyone from wanting their own bat box, such is the enthusiasm of the cognoscenti that we recently secured an export order for a bat box to Belgium.

Bat boxes are most successful as summer roosting sites and may be in use from April to September. They have been used less successfully as hibernation sites through the rest of the year. The inside temperature must remain above -4°C . The success of the box depends less on its design than on other factors. It is obviously best in a situation where there are few alternative roosting sites, such as the edge of coniferous woodland or where a previous roosting site has been removed. Nationally the most common species to use boxes are Long-eared bat *Plecotus auritus*, Noctule *Nyctalus noctula* and Leisler's bat *Nyctalus leisleri*. The boxes should be fixed as high as possible on the main trunk of a tree and ought to face south or west to gain warmth from the sun for part of the day. The entrance should be free from obstructing branches. Success may be increased by having two or three boxes in different positions in the garden, for bats often change roost sites.

Having done all this, the sign of success is a heap of droppings at the bottom of the box. These are like mouse droppings but dry and odourless. The acid test is to crumble the droppings and look for small bits of insect wings and bodies. If you have mouse droppings they will be goeey and smelly. Good luck with your boxes and I look forward to hearing of the first recorded bat in a box in this part of the county.

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Notes on this revision

This report was originally published as the **1986 North Notts Nestbox Report** for the Nottinghamshire Trust for Nature Conservation in October 1986 and distributed to nestbox sponsors, various trust officers, CBC observers and ringers in Treswell and Gamston Woods. It was produced using Wordwise on the BBC Microcomputer. The front cover was a line drawing by the (not very old) Adèle du Feu. This edition has been produced using TechWriter on the Acorn RISC PC from the original Wordwise files. Any errors detected have been corrected, scientific names of species added and some minor changes made to aid readability.

Chris du Feu,
November 2000