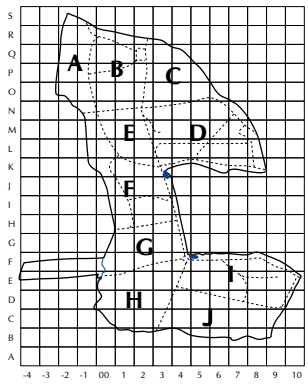


TWITTER

Treswell **W**ood - **I**nformation **T**o **T**ell **E**very **R**ecorder

October 2006 Treswell Wood IPM Group
(Integrated Population Monitoring)

2006/4
Number 59

All projects by permission of NWT

Project leaders:

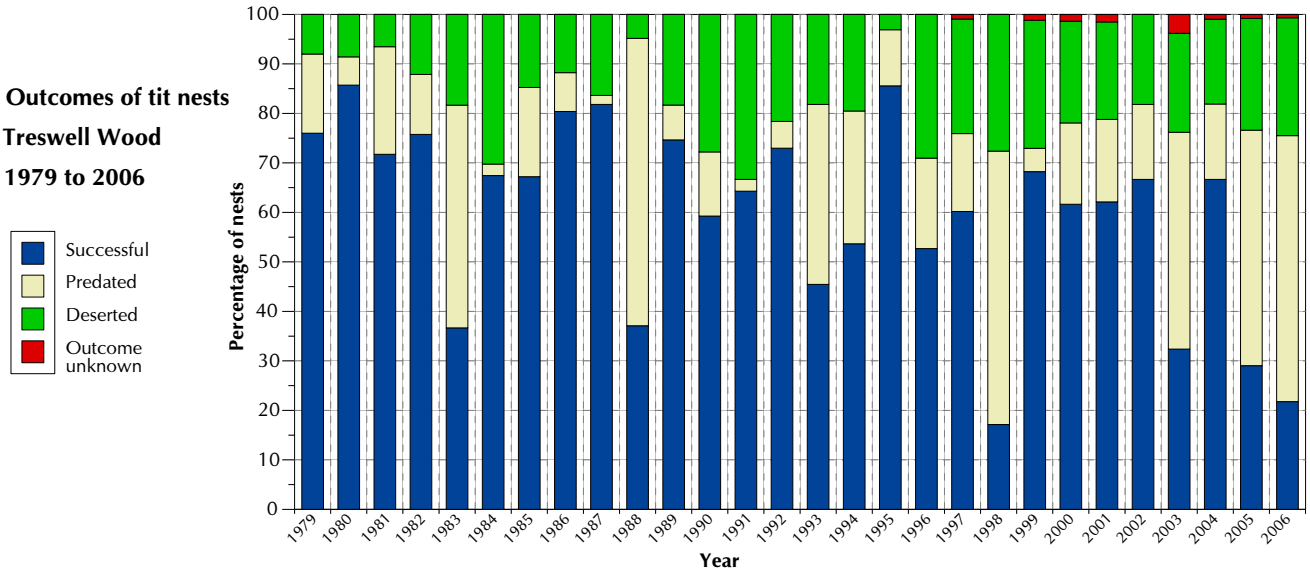
CBC	Nest Records	Ringing
Pat Quinn-Catling	Chris du Feu	John McMeeking

Thoughts on the 2006 Nestbox Season from John Clark

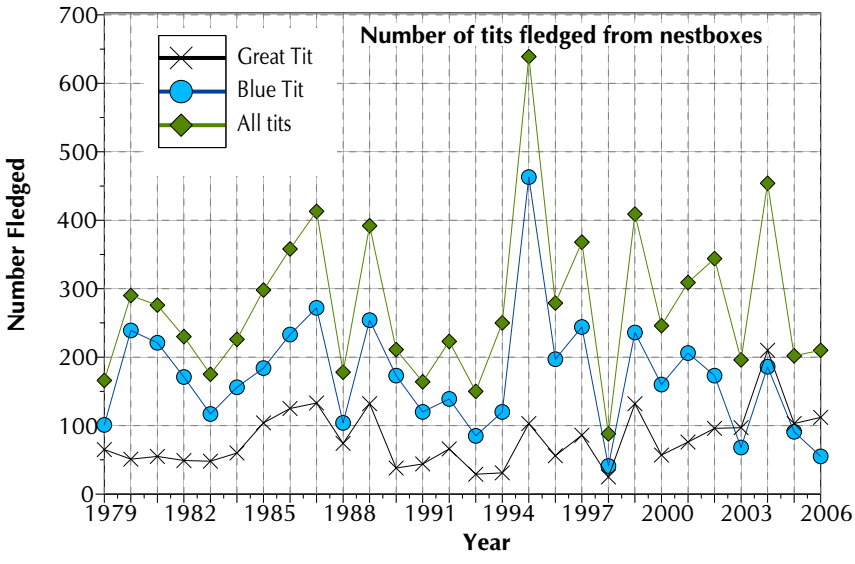
We begin this report with thanks to all the nest recorders from David Glue at the BTO.

> *Thank you all for the 27th year of nest record input from the wood - a marvellous series. It is a great pleasure to see the steady stream of publications coming forward which draw on the team's hard work. A flagship enterprise from which I hope you all gain a huge measure of pleasure.*

The 2006 nest-box season was bad, with only 20% of the nests in boxes succeeding, but how does that compare with our past record? As shown below, in terms of the proportion of successful nests in the boxes, only 1998 was worse. The main problem was predation, with both mice and weasels taking a heavy toll.



Measuring success in terms of numbers fledging, the picture was equally bad, considering the number of nests recorded, with only 201 birds fledging. A very poor return for the 260 adults from the 130 boxes where eggs were laid.

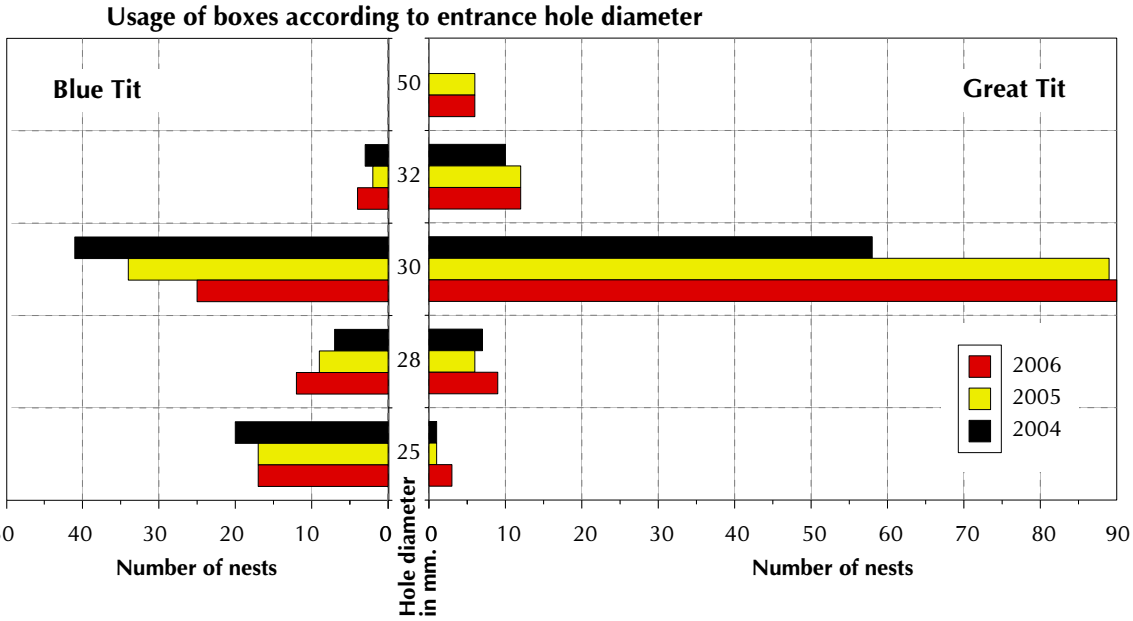


Once again, the Great Tit numbers fledged exceeded the Blue Tit numbers. Perhaps there is a reason for this? Looking at the mix of nests in the dormouse boxes and the original is interesting. The proportion of Great Tits to Blue Tits in the dormouse boxes has been rising from approximately double when the boxes were introduced in 2003, to five times in 2006. In the main set, the proportion

has changed from around half in 2003 to equal in 2006. Perhaps there is something about the dormouse boxes that attract the Great Tits?

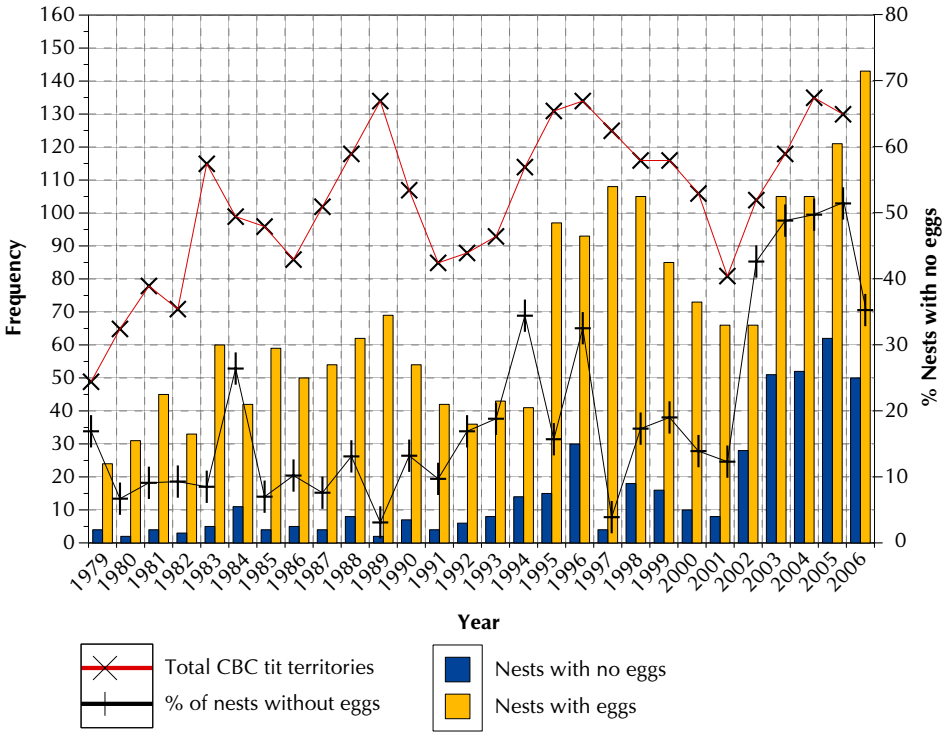
Numbers of boxes where eggs laid

		2003	2004	2005	2006
Main Set	Blue Tit	21	22	18	18
	Great Tit	11	13	14	18
Dormouse Boxes	Blue Tit	18	18	17	14
	Great Tit	42	41	57	71



The two main differences are the position of the entrance hole (on the front of the box for the main set, on the side for the dormouse boxes), and the hole size (30mm for all the dormouse boxes and a mix of sizes from 25mm to 50mm for other boxes). The adjacent figure shows the number of nests, by species, in boxes with different nest box hole sizes. It is clear that the birds are broadly following the instructions in the Nestbox Guide, that Great Tits can use boxes with a hole of 28mm and over, leaving boxes with smaller holes to the other titmice. The dormouse boxes in the wood with 30mm holes have given a huge nesting opportunity to the Great Tits (the dominant species if there is a competition for nesting space) whereas the main set have a number of boxes only suitable for Blue, Coal and Marsh Tits.

How many boxes should we have in the wood? With the number of partially built nests rising over the last four years, it would appear that a number of birds are starting nests, but are not able to establish a territory and fail to complete them. This did not seem to happen as much when there were fewer boxes in the wood, but has now reached over 30% of the nests started. As can be seen on the chart, the situation changed greatly in 2003 when the dormouse boxes were introduced.



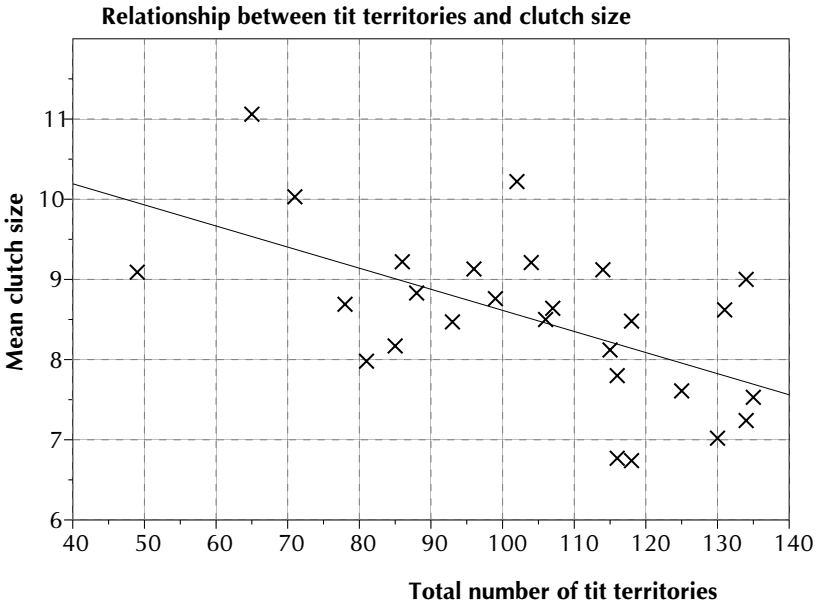
The gap between the Nests with Eggs bar and the Total CBC Tit territories also shows what a large proportion of the tit nests in the wood are in boxes. With over 400 boxes in the wood and a maximum of 140 territories, it is perhaps surprising that there are any natural holes used.

The last thing I looked at was whether the number of territories in the wood had any affect on clutch size. This needs refining, but to start the analysis I took the

number of all the tit territories (Coal, Blue, Marsh, Willow & Great) from the CBC for one axis, and calculated the average number of eggs laid from the boxes where the clutch was completed (i.e. the nest did not suffer from egg predation or desertion at the egg stage).

The trend line for the chart shows the correlation between the clutch size and the number of territories, and a high r^2 value suggests that the number of territories in the wood explains about 60% of the variation in the clutch size. Presumably other factors such as food availability also play a large part.

So, perhaps we ought to reduce the number of boxes in the wood, and provide more of a spread of hole sizes to favour some of the smaller tits.



BTO Constant Effort Sites Scheme, Treswell Wood, 2006

Species	2005			2006			Change 2005 - 2006		
	Ad	Juv	Prod%	Ad	Juv	Prod%	Ad	Juv	Prod%
Sparrowhawk	0	0	X	1	1	100	+	+	+
Tawny Owl	1	0	0	0	0	X	–	=	X
Woodpigeon	1	0	0	1	0	0	=	=	=
Great Spotted Woodpecker	2	1	50	1	0	0	–	–	–
Wren	24	18	75	13	10	77	–	–	+
Dunnock	19	3	16	13	5	38	–	+	+
Robin	17	10	59	8	22	275	–	+	+
Blackbird	25	5	20	21	4	19	–	–	–
Song Thrush	2	1	50	7	2	29	+	+	–
Blackcap	20	3	15	27	3	11	+	=	–
Chiffchaff	3	1	33	2	0	0	–	–	–
Goldcrest	0	0	X	0	1	X	=	+	X
Willow Warbler	0	1	X	0	0	X	–	–	X
Spotted Flycatcher	2	0	0	2	0	0	=	=	=
Long-tailed Tit	5	4	80	3	12	400	–	+	+
Marsh Tit	2	0	0	1	2	200	–	+	+
Willow Tit	1	0	0	0	2	X	–	+	X
Coal Tit	0	2	X	0	4	X	=	+	X
Blue Tit	4	0	0	5	13	260	+	+	+
Great Tit	18	0	0	7	6	86	–	+	+
Treecreeper	4	1	25	10	10	100	+	+	+
Nuthatch	0	0	X	0	3	X	=	+	X
Jay	1	0	0	1	0	0	=	=	=
Chaffinch	13	2	15	8	2	25	–	=	+
Goldfinch	1	0	0	0	0	X	–	=	X
Bullfinch	11	3	27	11	2	18	=	–	–
Totals	**176**	**55**	**31.3**	**142**	**104**	**73.2**	**–**	**+**	**+**

Key Ad - adults caught, Juv - juveniles caught,
Prod% - productivity (Juv/Ad) – down, + up, = no change, X not calculable

This issue of Twitter seems to have filled very rapidly so there are few comments on our CES captures. Beware of reading too much into small sample sizes. The fall of 50% in the number of adult Chiffchaffs, for example, is likely to be a result of chance rather than indicating a major crisis for the species. Similarly, even the much larger increase in the number of juvenile Blue Tit captures (in spite of the terrible nestbox breeding season) is likely to be the result of a chance capture of a party of juvenile Blue Tits in the constant effort nets.

The Treswell Wood IPM Data Set

We have, of course, computerised all our ringing data, CBC territory maps and nest record summaries. In addition to these ornithological data, over the years we have gathered a good deal of information about other things in the wood. Some of this information is computerised - for instance Steve Wain has produced maps showing the age of coppice in each part of the wood in each year, and maps of where pigs have been used to control brambles. Particularly over recent years, we have been recording other species where we recognise them. This recording is by no means as systematic as our bird work, but nevertheless does provide a record. We are not alone in this - see David Glue's note of a new species of dragonfly on his local patch.

Whereas our ringing data are highly organised, our other records are just written records - sometimes just a species name, sometimes some additional description of behaviour or other features. All such records are of absolutely no use at all unless they are accessible. Some years ago, I was asked for records of deer in the wood. After trawling through some years of field sheets I could not find the vital record I knew we had written. Human memory is not always very good at recalling exact dates. What seemed like only last year often was, in fact, several years earlier.

Fortunately, our computerised data, even when recorded as unstructured textual records, are easy to search. This is how. All our 'other species' data are ultimately produced as PDF documents. This is a format which is very stable and can be read on any computer - the software for reading it on a PC, Adobe Acrobat reader, is freely available. Acrobat reader has a wonderful search facility. It is best to have all the documents to be searched in one directory. Load the first document, enter the keyword to be searched for in the Search window, and indicate that all files in that directory should be searched. A list then appears of the PDF documents in that directory where the keyword appears and these can be examined individually as required. This also works for searching back issues of Twitter, which are also produced as PDF documents.

There is a down-side to this, of course. Someone has to enter the data in the first place. We have only recently begun this work so out of our thirty years of notes, only data for the last few are computerised. Astute readers will be detecting an imminent call for volunteer effort. Correct! If you could give some time to this job over the long winter evenings, then please ask John or Chris. Pay is zero, but posterity will be very grateful.

And what have we noted recently?

In the last issue we reported pendulous sedge, *Carex pendulosa*, prior to that it was the slug *Boettgerilla pallens*. Recently Jo Surgey was innocently taking photographs for her third-year university project when she came across an attractively marked fungus. This was later identified as the magpie ink cap, *Coprinus picaceus* - again new to the wood and not commonly recorded in the area. Thanks to John Ellis at the Wildlife Trust for discovering more about the species. He says it was been found (probably in 1999) in Gamston Wood. It has been found, many years ago, in Whitwell Wood just outside Worksop in Derbyshire under beech which is the classic tree for it to be found with. In Nottinghamshire it is rare and certainly worth recording. Nationally it is regarded as infrequent or uncommon. Clive McCormack has started to look at contents of droppings of some of the birds we ring. Not a new species for the wood, but of particular interest was a record of the harvest mite, *Trombicula autumnalis*. Normally we see this, often in abundance, around the cloaca of Dunnocks and, less abundantly, on other birds. Clive noted that some of these mites must have come to the nutritional aid of Robin P400401 as many intact mite legs were present in its droppings. The legs appear to be quite distinctive and can be viewed on this link http://www.the-piedpiper.co.uk/th5i.htm Clive also noted a Bullfinch carrying the parasitic gapeworm; *Syngamus trachea*. This parasite is more commonly found in Robins and thrushes. Finally, and happily, we have not seen any birds apparently infected by the *Trichomonas* parasite. Infested birds have been recorded in the area and appear lethargic, with fluffed feathers and flying only weakly. Death is the only result for the birds. The disease is not transmissable to humans and is not related to avian influenza. More information can be found on www.bto.org/gbw/NEWS/disease_outbreak.htm

From David Glue

Please thank all members of Treswell Wood IPM GRoup for their ongoing support of BTO surveys - which is highly valued.

It has been a second below par breeding season with the inevitable exceptions, as Robins typify. Late to start, after the coldest winter for a decade; with limited fruiting yields having some extra impact on survival; and swift to conclude for many song birds, water fowl and game birds influenced by the cool, damp spring episodes in late May and the searing heat of July.

In many ways a more 'traditional' season regarding timing with tits, corvids, Barn Owl and certain thrushes held back by the combination of March wintry chill, drought, retarded vegetation (that worked up through the food chain to check insect and rodent populations). Many spring migrants were again, as in 2005, held back by northerly winds in April with short song periods for CBC 'old' folk like ourselves. Many Tawny Owls appear to have taken a 'gap year'. Blue Tit egg timing and tit survival gives a measure of concern.

I recorded Red-veined darter on my CBC plot in Aylesbury for the first time, ovipositing on the Tring reservoirs. We have a wonderful experiment unfolding outside our window, if not a somewhat frightening one. The likes of Treswell Wood IPM Group will be at the forefront to quantify the story. Keep up the excellent work, whilst having fun. Thanks again from the BTO for ongoing, treasured support.

Noteworthy Captures

Species	Age/sex	Ring	Date	Grid

Sparrowhawk 3M DA51866 27/8/2006 L04

As so often, a Sparrowhawk capture is of a juvenile male. Females seem to escape from nets more easily than the much-smaller males. Of the Sparrowhawks we do catch, most are juveniles, perhaps still wandering in search of a permanent hunting ground. The table below gives the comparisons between age and sex classes. The 'Recaptured' column shows the number of that sex ever recaptured. Surprisingly only one individual has a capture history longer than just a few months. This was a juvenile male, ringed in 1981, which reappeared in 1983 as a breeding male with a nest in the wood.

Sex	Males			Females		
Age class	First year (age3/5)	Older	Recaptured	First year (age3/5)	Older	Recaptured
	33	5	11	11	3	0

Great Spotted Woodpecker 3 CT84274 6/8/2006 Q02 Feeder

After abundant captures in recent years, particularly at the feeders, numbers have dropped suddenly. We still hear them frequently but numbers do seem to be down this year. What a pity - we had just formulated a plan for looking in more detail at the sequence of their post-juvenile moult, in the hope of improving the ageing technique for the species. On the other hand, our Willow Tits have not suffered nest predation by these woodpeckers this year - a silver lining to the cloud?

Wren 3J AVL315 24/9/2006 Q02

All our early and mid-season Wren nests in boxes suffered at the hands of predators or weather. The two very late nests, however, survived. This bird was ringed as a nestling in one of these in L04. Today, when it was retrapped it came as a surprise to see a bird still in its full juvenile plumage with post-juvenile moult not yet started. Examination of its ringing date of August 6th gave the explanation. Whether it has much chance of survival with its post-juvenile moult yet to start remains another matter.

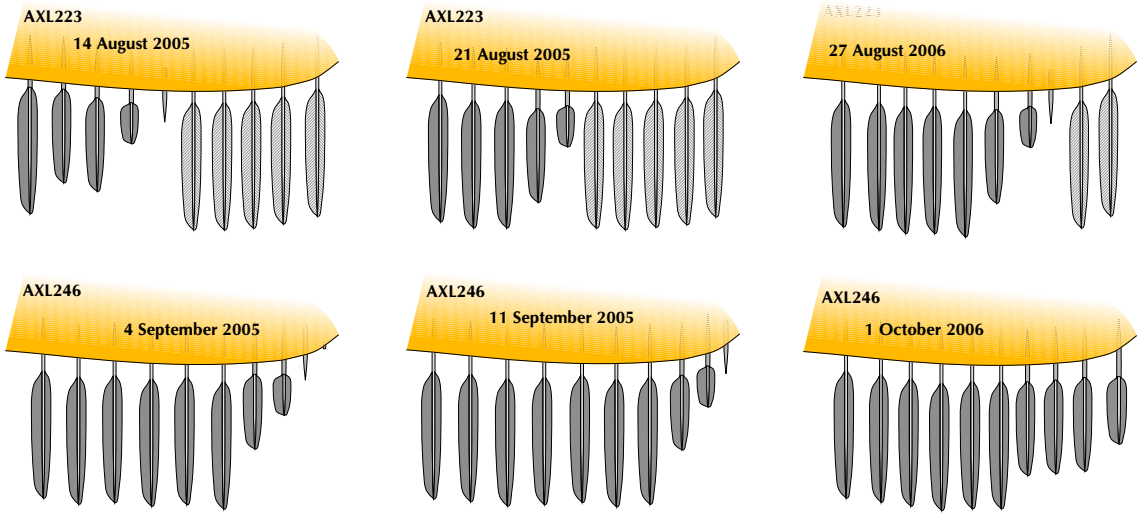
Robin 4 P400401 24/9/2006 Q02

This is one of the birds that own the car park area. It was ringed as a juvenile in June 2001. Keep a lookout for it. Our Robins will definitely be the subject of the study mentioned in the previous Twitter, so any additional sight records will be particularly welcome. We are using seven colours of ring - Red, Black, White, Yellow, Pink, Light Blue, Light Green. Some older Robins may carry a two-coloured ring (Pink and Black) above the metal BTO ring. A typical sight record will include date and time, place in the wood and colour-ring combination - something like ***Left: Yellow over Red; Right: Pale Blue over Metal*** ring.

Chiffchaff 4 AXL223 27/8/2006 K04

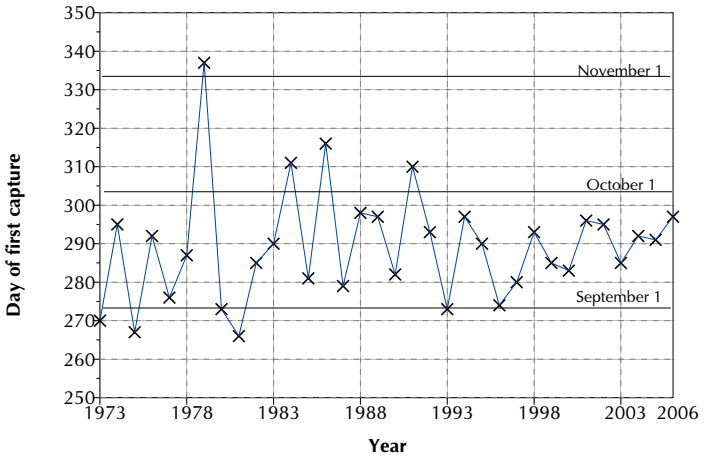
Last year we were pleased to trap this bird twice during its moult. In Twitter 54 we showed diagrams of its progress through moult (together with similar diagrams for two other Chiffchaffs we had also trapped twice during moult). We also, later, retrapped a second of these moulting Chiffchaffs, AXL246. By only looking at one bird, we might be tempted to draw misleading conclusions about longer seasons resulting from climate change, or earlier moult resulting from climate change. When extrapolating from rates of moult last year, AXL223 seemed to be moulting about one week earlier this year but AXL246 about two weeks later. Much larger samples needed!

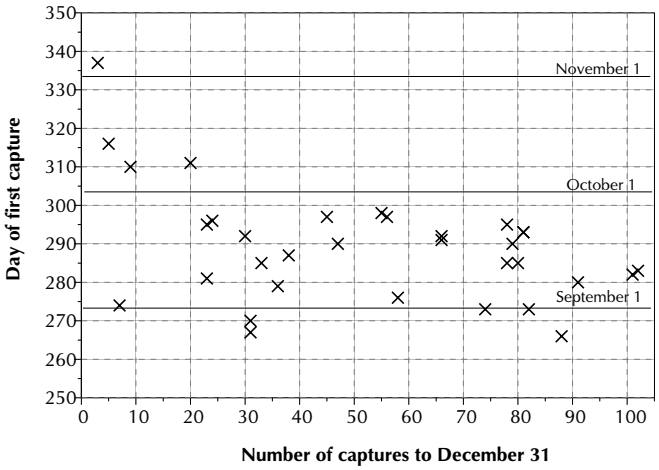
Ring		Moult Records 2005		Moult Record 2006
AXL223	Date	14-08-2005	21-08-2005	27-08-2006
	Moult scores	4442100000	5554200000	5555542100
AXL246	Date	04-09-2005	11-09-2005	01-10-2006
	Moult scores	5555553211	5555555321	5555554443



Goldcrest 3M 2U4116 24/9/2006 D03

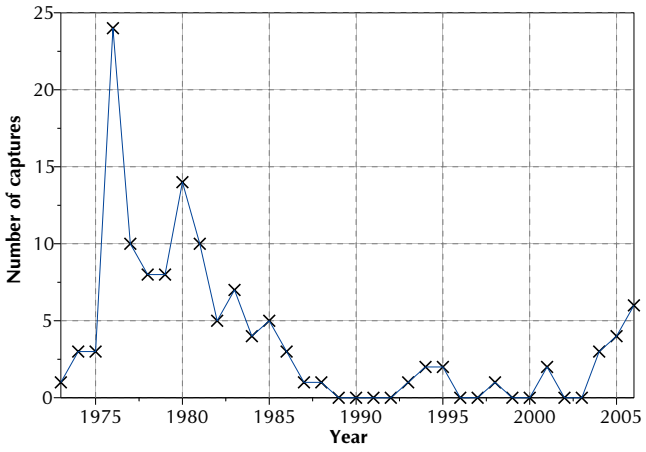
The first Goldcrest of the autumn (excluding the juvenile ringed in the late summer which is likely to have been reared fairly locally). This is a fairly typical arrival date - the first graph below shows the sequence of first arrival dates (excluding birds aged 3J) over the years.There is a weak trend towards later arrivals - about half a day per year. Also of interest is the relationship between first arrival date and the number of captures up to the end of December. This gives some measure of abundance of arrival without the interfering effects of mortality resulting from late-winter weather. Again, there is a weak relationship with earlier arrival in years of greater abundance.

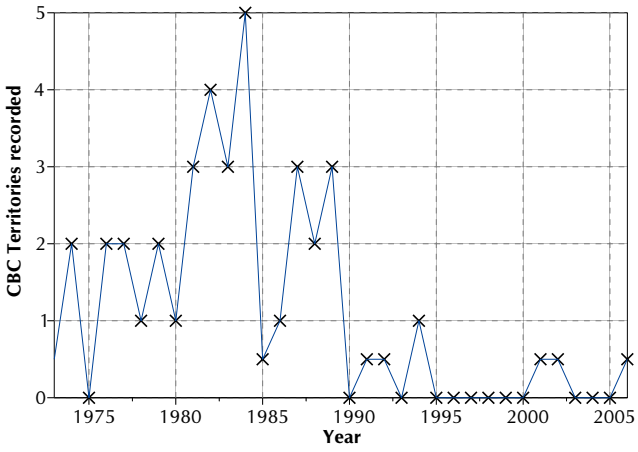




Spotted Flycatcher 3 R558859 20/8/2006 O02

Whether you consider CBC results, numbers of birds captured or nests found, our Spotted Flycatcher population declined from a peak in the early 1980s to extinction in the late 1990s. Other populations in the area have been much reduced or have become extinct too, so it is not just Treswell Wood. The national picture is not bright either - the species is suffering a long-term and rapid decline (see www.bto.org/birdtrends2005).





Our recent mist-net captures, however, have shown the possibility of a return with the third successive annual increase in captures and the highest number of captures since 1983. The CBC detected one territory last year - we

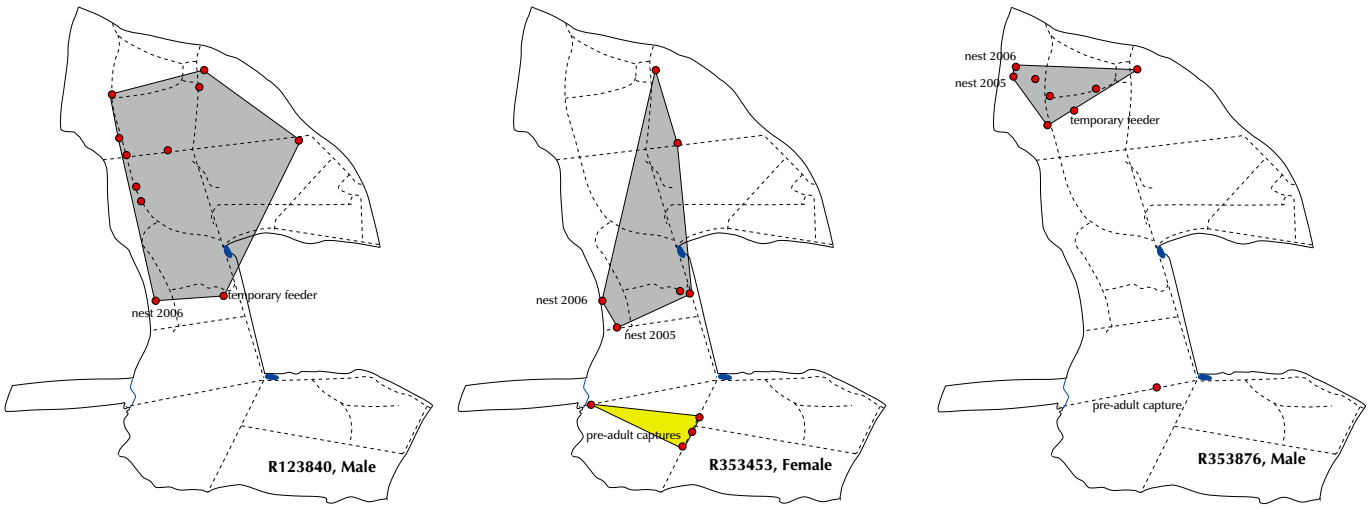
wait to see what the 2006 CBC data reveal. (Note that, in the CBC territory graph above, a species which is present but with no territory confirmed is awarded a score of half a territory.)

Coal Tit **3** **R558838** **27/8/2006** **M04**

Blue and Great Tits suffered a terrible breeding season in the nestboxes. Coal Tits avoided some of the predation and other failures with three nests producing fledged young. However, they are far less common users of boxes than these other two species. It is pleasing, therefore, to recapture some of our 28 nestling-ringed Coal Tits. This one was the first of the year, having been ringed in May in C05.

Willow Tit **4** **R123840** **24/9/2006** **N-1 At nest**

One of three Willow Tits identified by its colour rings by the RSPB team. This bird was ringed in October 2002. Unlike the other two (including its partner of this year) this older bird was not observed by the team at a nest last year, although we did trap it in that season (at the most easterly point shown in its map, below). The maps show the, potentially large, ranges these birds may have and how their breeding territories can be far smaller than the area within which they rove at other times of the year. Note also how the ride across the narrow part of the wood still seems to be a clear demarcation line between the northern and southern adult Willow Tits. R353453 shows a pattern frequently seen (in both Marsh and Willow Tits) with juvenile captures in one part of the wood, followed by all adult captures strictly in the other part.



Willow Tit **4** **P400097** **24/9/2006** **O-1**

A goodly age for a Willow Tit and an obvious survivor. It is one of the birds observed last year at a nest by the RSPB team. At 6 years and 71 days since ringing, it is our third longest capture history for this species. Our longest is only 6 weeks greater. It still has another 4 years to break the national record held by a bird from Attenborough.

Marsh Tit **3** **R558824** **1/10/2006** **E04**

We have often observed how Marsh Tits remain either in the north, or in the south, of the wood once they have reached adulthood. This bird, and its sibling R558825, were ringed in north of the wood in a stump box (intended for Willow Tits). They were both trapped at the car park feeder, a few metres from the stump in June. By late June, one had been trapped in the south of the wood (E00) and both are now being trapped in the south. It will be interesting to see if they are ever seen again at the feeder in the north (which they obviously know about), or if they remain strictly confined to the south of the wood.

Blue Tit **4F** **R558085** **8/10/2006** **P01**

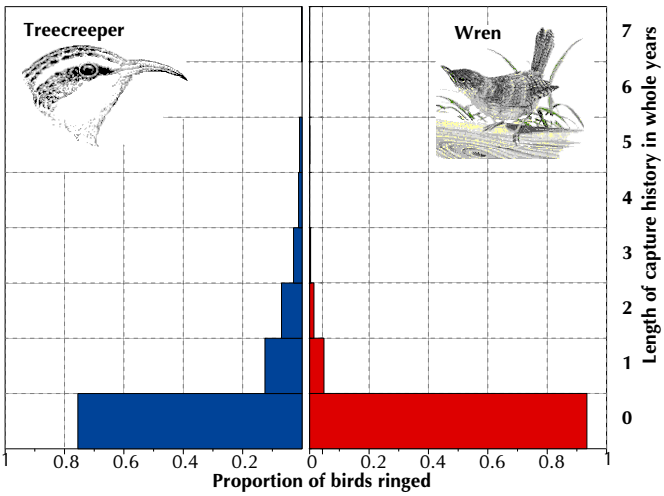
It is always pleasing to be able to follow the life histories of nestling-ringed birds. We ringed this in 2003 in N05 and recaptured her several times in the following summer and autumn, recording her through each stage of her post-juvenile moult. Thereafter she appeared frequently roosting in boxes (always 9 or 13) over the next three winters and was found nesting in boxes 13, then 9 in 2004 and 2005 respectively. We did not find her nesting this year but nests were made in both 'her' boxes. One was usurped by a bumble bee and the other was built but eggs never laid - it is quite possible one of those nests was hers. Neither did we capture her in mist nets between her last roosting appearance on 31/12/2005 and today.

Great Tit **3** **TC61337** **3/9/2006** **Q02 Feeder**

No room for complacency, ever, but we are doing quite a good job of systematic recording of moult. This bird, ringed by Dan Bardsley as a nestling in the south of the wood in June, has been captured four times at the feeder. During these captures we have recorded its progress through moult - 19 July, moult not started; 2 August post-juvenile moult begun; 13 August tail also moulting. We just await another capture showing completion of moult.

Treecreeper **4** **5Z1452**
3/9/2006 **O06**

In spite of their small size and diet of live invertebrates, some Treecreepers do enjoy long lives. This bird was ringed as a juvenile in June 2002 and, 4½ years later is still thriving. He has some way to go to reach our longest-lived Treecreeper, 8B5230, which, at over 7½ years was only 5 months short of the national record. Contrast the capture-length patterns of our Wrens and our Treecreepers. In spite of their similar diet and size, Treecreepers do seem to last much longer. In our paper in Ibis, some years ago, we contrasted various aspects of Treecreeper and Wren survival. It seems that, in woodland, the Treecreeper's large territories compensate for its lower fecundity. Of course, the Wren wins in other habitats where Treecreepers cannot survive.



Nuthatch **3F** **TC61199** **24/9/2006** **N01**
We are catching more of this attractive species. It is also heard almost every time we are in the wood. It has, of course, shunned all our nestboxes, including the dozen boxes intended particularly for it. Its first appearance in our nets was in 1981 and we caught just a handful each year until the late 1980s. It reappeared in 1995 and has been present since then. This year we have already ringed more than in any other year - 14 individuals - and our total number of captures for the year so far is 25, only one short of the record number in 2004.

Controls and recoveries

Species **Age/sex** **Ring** **Date** **Grid**

Tawny Owl **Adult** **GJ80611** **31/7/2006** **Low Burnham, Doncaster**
In the previous Twitter, we reported Tawny Owl GF42548 raising our record for time from ringing to last recapture to 9 years and 355 days. This bird has done rather better. It was found dead 23km north of the wood. We ringed it as a nestling on 17 May 1982. Still some way to the national record of over 20 years, but 14¼ years is a good try. There had been no reports of this bird between ringing and this event.

Blackbird **4** **CF40648** **27/8/2006** **M04** **Found dead**
Ringed as a young female in 2002, we last retrapped this bird in March 2005 in this part of the wood. Her remains were found, dead for some weeks - another small addition to the national survival and mortality statistics.

10 Week Summary 2006 Interval 4 in Standard Sites

Visits 1800, 1802, 1796, 1797, 1799, 1798, 1801

	New Birds			Recaptures			Total
	Adult	**5**	**3**	**Adult**	**5**	**3**	
Sparrowhawk	.	.	1	.	.	.	1
Wren	1	.	10	2	.	.	13
Dunnock	.	.	.	1	.	.	1
Robin	2	.	14	4	.	5	25
Blackbird	1	1	.	1	.	.	3
Blackcap	2	1	1	1	.	.	5
Chiffchaff	.	.	.	3	.	.	3
Goldcrest	1	.	4	.	.	1	6
Long-tailed Tit	4	.	.	3	.	.	7
Marsh Tit	.	.	.	1	.	2	3
Willow Tit	.	.	1	1	.	.	2
Coal Tit	.	.	1	.	.	2	3
Blue Tit	.	.	12	3	.	6	21
Great Tit	.	.	2	2	.	3	7
Nuthatch	2	.	2	.	.	.	4
Treecreeper	.	.	2	5	.	3	10
Chaffinch	.	.	2	1	.	.	3
Bullfinch	1	.	5	2	.	.	8
Totals	**14**	**2**	**57**	**30**	**.**	**22**	**125**