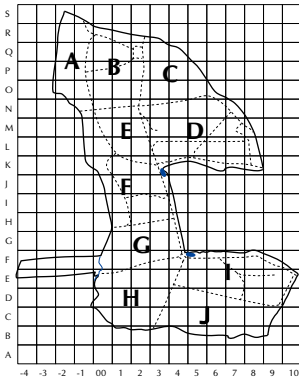


TWITTER



Treswell Wood - Information To Tell
Every Recorder **March 2006**
Treswell Wood IPM Group
(Integrated Population Monitoring)



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CBC

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Nest Records

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Ringing

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2006/1

Number 56

Willow Tits

In February, Alex Lewis gave a seminar for some RSPB staff and others involved with the Willow Tit project. The aim of the RSPB's work is to discover why the population is in such steep decline - down by 65% since the start of the BTO Breeding Bird Survey in 1994. It is the greatest percentage decline recorded by the BBS for any British bird species. Although the species is widespread across northern Europe and Asia, and not endangered, the British subspecies *Parus montanus kleinschmitti*, has very different habitat requirements from other forms which prefer coniferous woodland. The current data set for nest performance is small and, probably, biased. Most full British nest records are from nests which have been opened by the observer and then closed again. Even with an endoscope it can be difficult to count the number of eggs or nestlings. Alex has looked at a wide range of habitat and other variables in her two sets of study sites. The sites in the south east consist of matched pairs of sites - one where Willow Tits still live, the other where they have become extinct. The intensive studies involving observations of individually colour-ringed birds have been in the midlands. She has worked at several scrubland sites and one woodland - Treswell Wood.

What has been found so far? Of the environmental variables examined in the south-east observations, the only possible factor may be wetness of the ground. Drier sites could be less favourable. Factors examined included standing trees, dead wood, canopy cover, ground cover and soil water content. Competition and predation did not seem to be a factor in these studies.

In the Midland intensive surveys there was one big difference between scrubland and woodland. That was predation by Great Spotted Woodpeckers. The population of this species has increased greatly recently - both nationally (BTO index doubled since 1990) and locally (see Twitters 43, 50). The two Treswell Wood Willow Tit nests which reached the chick stage in 2005 were both destroyed by this species. The woodpeckers are far more common in woodland and this may mean that woodland sees a much higher nest failure rate than does scrubland. One cause of the increase in Great Spotted Woodpeckers may be the decline in the breeding population of Starlings in woodland (Treswell Wood lost its breeding Starlings in the 1980s). Starlings usurped the newly excavated woodpecker nest holes, forcing the exhausted woodpeckers to excavate another nest and breed later at a less-than-optimal time.

Alex noted that there had been considerable loss of scrubland sites in some areas. In the south east, much housing development has been on brownfield sites. These, apparently unpromising, derelict and untidy relics of industrial activity can be very rich in species diversity and abundance of individuals - although they are often regarded as ideal places for redevelopment rather than greenfield sites. Paradoxically, many greenfield sites are, in fact, low in wildlife value after many years of monocultural soil depletion. The tentative conclusion is that scrubland is the source of Willow Tit productivity and woodland is a sink. Of course, the data set is still very small, with only our woodland having been studied closely. However, we do have more anecdotal evidence which is much in line with these findings. First, all four of our control Willow Tit movements have been into the wood. Two have been from Darlton(2001 and 2003), one of which was ringed in the short-rotation willow coppice (which is also counted by the RSPB team as scrubland). The other two have been from nearby Gamston Wood (1983) and Maumhill Wood (2002). Second, after last summer's nest failures we very soon caught juvenile Willow Tits in the wood. Alex is pretty sure that they do not come from Treswell Wood nests - the species is distinctively noisy enough to be able to detect breeding territories reliably. We can only conclude they came from nearby surrounding habitat - that would include the hedgerows (which Alex counts as one of the scrubland components). Overall, then, not a happy picture for our Willow Tits but we have been able to use our work to help understand what forces are responsible to the decline of this species.

The RSPB study continues this year and we think that, at present, Alex and her field worker, Laura, have a population with every individual already colour ringed.

David Glue notes that the BTO Nest record cards show a marked use of wetland scrub sites which have suitable nest hole excavation potential and allied dense farm hedges as opposed to mature woodland. He says the cards deserve closer hand analysis as observers' non-coded comments carry greater strength than for many other species.

Patterns of egg mortality of Tits in Treswell Wood nest boxes in 2005

Dr Charles Deeming, Visiting Fellow, Dept of Biological Sciences, University of Lincoln

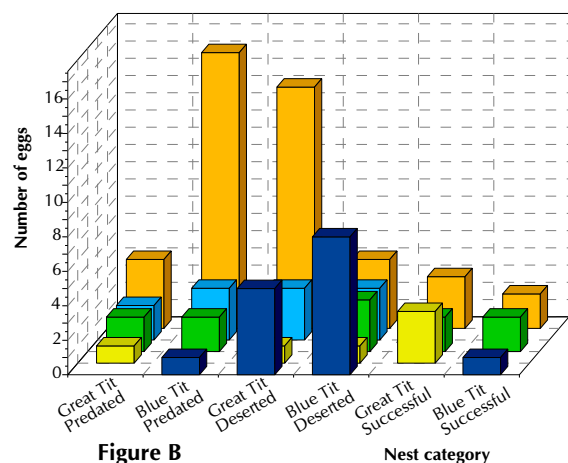
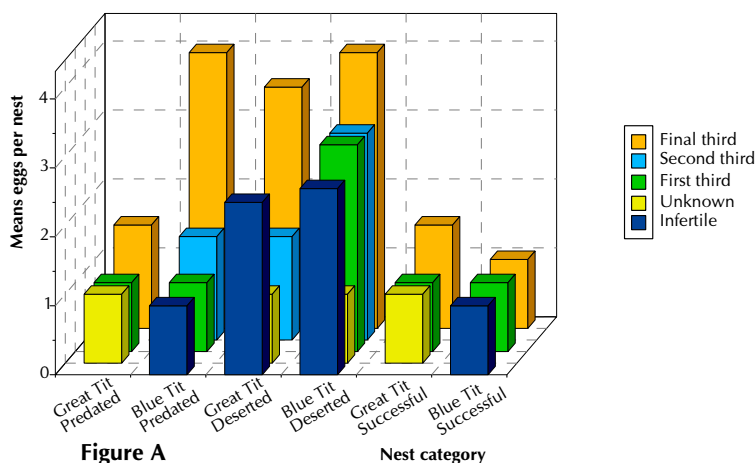
The ability of incubating birds to hatch their eggs successfully is critical in lifetime reproductive performance. Emphasis typically lies on the number of chicks hatched, which subsequently go on to fledge. However, some eggs do not hatch and this loss of reproductive effort has not been extensively studied. This study aimed to document the pattern of infertility and embryonic mortality of Blue Tit and Great Tit eggs that fail to hatch in nest boxes in Treswell Wood.

The eggs were collected under licence after all chicks had fledged. They were opened to determine whether the contents contained an embryo or not. The approximate age of embryonic mortality was assigned to either the first, second or third trimester of the incubation period. Some eggs were either broken or, more commonly, rotten and so were assigned to an "unknown" category.

Recovery of unhatched eggs from Blue Tit nests was higher than Great Tit nests because of a higher count in predated nests (See Table); otherwise the numbers of eggs collected were comparable for the two species. For Blue Tits, most eggs were in the third trimester of development and most of these were in predated nests although there were high numbers of apparently infertile eggs in deserted nests (Figure A). For Great Tits most eggs were found in deserted nests and again the two largest categories were infertility and mortality during the last third of development (Figure A). Rotten eggs were relatively infrequent. The data are presented as mean eggs per nest in Figure B. For both species the large losses were observed in deserted and predated nests with most embryos reaching the last third of incubation before dying.

These data are the first results of what is hoped will be a long-running study of the pattern of the pattern of embryonic mortality in tits in Treswell Wood. With the kind assistance of the Treswell Wood team, for which I am very grateful, this work will continue in 2006.

Species	Total nests	Number of eggs found in:		
		Successful nest	Predated nest	Deserted nest
Blue Tit	17	5	22	19
Great Tit	16	8	9	23



Local movements of our birds

In an attempt to discover more about how widely our birds travel, John Clark arranged to ring in David Bower's garden in Treswell village (incidentally renewing our ringing connection with the Bower family). It is just under 2 km from the wood to this part of the village. John placed additional bird feeders in the garden a week before attempting ringing. The first day's operation was very successful with two Treswell Wood birds appearing in the total catch of 45 birds. Amazingly, two days later, two of the newly ringed Treswell village Great Tits appeared in Treswell Wood, both found in the same net round. This was not a case of a pair of birds travelling together as both birds were female. Later visits provided more movements to and from the wood. Details of these four movements appear in the Controls and Recoveries section.

In addition to the birds John has trapped, our list of controls has been augmented by more controls trapped during the North Nottinghamshire Ringing Course in February at several fairly local sites.

We have often noted the apparent spring influx to the wood of Great Tits in particular. From the recapture histories of the few birds so far it seems that this 'influx' may be part of a local redistribution of population prior to the breeding season. Some of the incomers may be just passing by. Others may be engaged in fairly wide ranging foraging behaviour which may take them to habitation surrounding the wood. According to BWP, 'After winter flocks break up, pairs first move about over a fairly wide area, more or less the same as that of the winter flock, showing increased preference for certain areas; territories remain fluid for several weeks.' However, it is also noted that typical social organisation within the species varies widely between different populations in different habitats. Perhaps we may be able to understand how ours are working.

Noteworthy Captures

Species	Age/sex	Ring	Date	Grid
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Sparrowhawk	5M	DA51865	15/02/2006	P01
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Our first Sparrowhawk of the year. As very often with the species, it was a new, young male. Females are much larger and escape from mist nets more easily. Young birds may still be wandering over a wide area, not yet having found a permanent territory.

Wren	6	5Z1449	05/02/2006	D08
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We ringed this ageing bird in 2002 about 100 metres east of where we retrapped her today. This was the first recapture event for the bird, three years and eight months after being ringed. Wrens are our most sedentary species so it is surprising that it has managed to avoid capture in spite of the dozen mist-netting visits along that ride since then.

Song Thrush	5	RX57687	15/01/2006	K04
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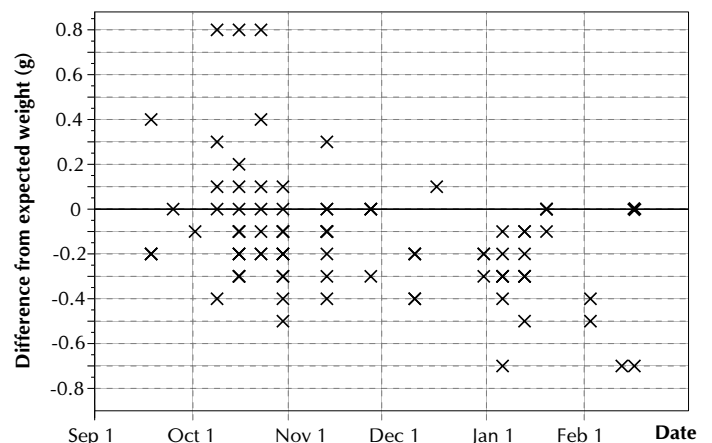
The first Song Thrush of the year. We rarely catch any of the species in winter (see Twitter 41 and the species acts like a classic migrant (except that its migration may be not very far at all, and it appears somewhat earlier than the more distant migrants).

Robin	4	R502795	22/01/2006	N02 Sight record
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This is the cover bird from the previous issue of Twitter where its foray into the unknown was described.. You will be interested to learn that it had returned to its former location at the main cross roads. It continues to be there with visitors to the wood reporting a very tame individual arriving to inspect what they are doing at the crossroads. It included a guest appearance during the North Notts. Ringing Course session in the wood on 19th February when it came to the main crossroads together with what could well be its mate T663169. This latter bird is not as tame and wears red over yellow rings on the left leg with pale blue over BTO rings on the right. Watch for both of them.

Goldcrest	5M	AXL369
	22/01/2006	N03

One of 70 Goldcrests captured to date this winter. According to 'Mc Meeking's Rule', the winter weight of a Goldcrest, in grams, will normally be numerically the same as its wing length in centimetres. Our birds went through a difficult patch over the New Year period when food must have been difficult to find and weather very cold. The graph shows typical deviations from the predicted weights. However, conditions eased after the end of January, this bird being the first to be back to its expected weight.



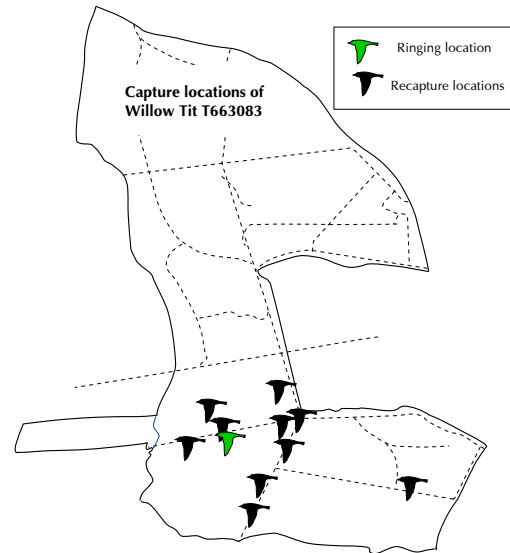
Willow Tit	6	P400097
	15/02/2006	Q02 feeder

It is five years and eight months since this bird was ringed. She is well known in the north-west quarter of the wood and was the female observed by the RSPB team last year at the unsuccessful nest in Q-2. It is interesting that these birds can survive so long in the poor breeding habitat, possibly having few, or no, successful nests at all in a long life.

Willow Tit	5	T663083	05/02/2006	D08
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This is, presumably, one of the 2005 immigrants to the wood from outlying scrubland habitat. We ringed it in July

2005 as a juvenile. The map shows its capture positions within the wood since then. Note the typical behaviour within the wood for the species. They rove very widely up to a point, and rarely stray beyond that. The demarcation line is Norman's Ride (shown elongated on the map). This bird seemed to decide rapidly to be one of the southern birds and has not been trapped north of the line. Remember to look out for these colour ringed birds.



Great Tit **6F** **R353761**
22/01/2006 **M05 feeder**

We have begun the spring programme of siting temporary feeders to attract Marsh and Willow Tits in order to try and ensure all our birds are colour ringed for the RSPB project. This bird seems to be a roving feeder specialist. (It would be helpful if the Marsh and Willow Tits were as reliable as this bird.) It has been trapped at permanent or temporary feeders in Q02, D00, C07 and M05. That is almost a full house. Apparently some people make it their mission in life to try and visit all Starbucks coffee houses. This bird seems to be suffering from a related problem.

Nuthatch **4F** **BE88950** **19/02/2006** **D08**

Our third Nuthatch ringed this year, in addition to recaptures of two others ringed previously. They do seem to be increasingly common in the wood, being heard almost every week. We hope that 2006 will be the year when they finally decide to use the nestboxes.

Brambling **6F** **T663161** **08/01/2006** **Q02 Feeder**

It is 8 years since we trapped a Brambling within the wood. Judging by this one's attachment to the feeding station, it had been driven into the wood by cold weather and lack of food. It is our 21st Brambling capture of which just one has been captured elsewhere (a bird ringed in winter 1975/76 and captured later in the same winter at Warsop).

Jay **5** **DA51864** **29/01/2006** **B03**

Our first of the species for the year. In spite of their apparent commonness nationally and locally this winter, we do have not heard them much in the wood.

Reed Bunting **5F** **T663213** **05/03/2006** **I04**

Our first Reed Bunting since November 1981. Unlike our visiting Yellowhammers, this species has never been particularly associated with feeding stations - whether our own or those for Pheasants. Their absence from the wood is easily explained by their severe national decline. The BTO CBC/BBS index peaked at 220 in the mid 1970s and declined rapidly to something around 100 within 6 years. It is just possible they are making a slight recovery - the index seems to be creeping upwards from its low point of around 90 ten years ago.

Controls and recoveries

As noted earlier, this section is rather fuller than usual because of the additional local trapping effort. Birds at these local sites are reported briefly and grouped by site.

Species	Age/sex	Ring	Date	Place
Coal Tit	4	R558504	01/01/2006	Nether Headon

One of our 2005 nestbox products, from the earliest tit brood of the year. We had not trapped it since ringing. It met its death by flying into a window. Incidentally, one of its siblings (R558506) was still in the wood last being recaptured on 29/01/2006.

Blue Tit	4	R809919	16/10/2005	Q02 Feeder
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A rather unusual control. This bird was ringed in March 2005 as a first breeding season bird in Staunton-in-the-Vale, 36 km south of Treswell Wood. By that time we would expect birds to be fairly settled in, or at least near, their breeding territory. It is possible it had been in the wood some time before we trapped it at the feeder. However, if it bred here in 2005, where was it reared in 2004? If it had just arrived in the wood, where had it bred and what was it doing?

Great Tit	5F	T582063	08/02/2006	Q02 Feeder
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The spring influx of great Tits has been less intense than normal, but this bird adds to the picture of the catchment area for our birds. Peter Harrison ringed it as a juvenile in Sturton-le-Steeple on 17/09/2005

Long-tailed Tit **2** **AJD432** **23/10/2005** **Darlton**

Ringed as a juvenile in Treswell Wood on May 2005, retrapped in October of 2004 still in the wood, but not captured in the wood since then. More of Peter Cobb's willow crop harvest.

Bullfinch **4M** **R353658** **19/08/2005** **West Burton Power Station**

We ringed this as a juvenile in the wood in November 2004 and had not retrapped it since then. Surprisingly few of our birds have been recaptured at either of the nearby power stations despite the long-term trapping effort there.

The Rampton connection

Long-tailed Tit **4** **AXL025** **16/02/2006** **Rampton**

Ringed in the wood on 3rd October 2004 and captured in the wood once more, on 24th of the same month.

Chaffinch **6M** **R353286** **16/02/2006** **Rampton**

Ringed 31st March 2003 at the car-park feeder.

Chaffinch **5M** **R353999** **16/02/2006** **Rampton**

Ringed 7th June 2005 at the car-park feeder as a juvenile

Chaffinch **5M** **T663043** **16/02/2006** **Rampton**

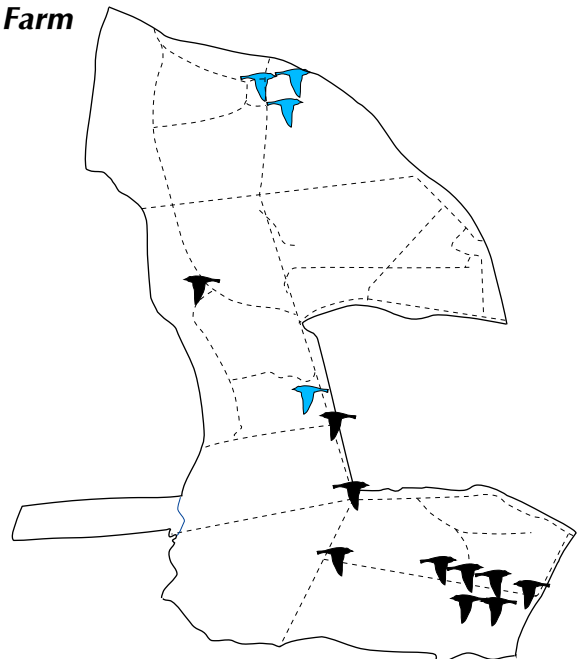
Ringed 19th June 2005 at the car-park feeder as a newly fledged juvenile and retrapped there twice during the same month.

Chaffinch **4F** **T663145** **16/02/2006** **Rampton**

Ringed 20th November 2005 at the car-park feeder with no subsequent recaptures.

The Treswell village connection - birds caught at Hillcrest Farm

We noticed that our first two birds from the wood to the farm had been captured in the south-east corner of the wood - this is the nearest point of the wood to Treswell village. Since then, almost all the birds which have moved between wood and village have been associated with this part of the wood, with the exception of three birds ringed at the main feeding station (all of 50 metres further from Hillcrest Farm as the Great Tit flies). The within-wood capture locations of the Treswell village birds are plotted on the map. Birds flying from right to left are incoming birds, those from left to right are our birds which have gone to the village. Black birds are those trapped in the wood on ordinary mist net sites, blue birds (or light grey on the black-and-white printed copies) are those ringed at feeding stations. The distribution of capture locations is marked, with surprisingly few ringed at the main feeder in spite of the large number which must pass through there. It would be interesting to see if our birds in nearby villages to the west of the wood were associated with the western side of the wood.



Coal Tit **5** **T100537** **19/03/2006** **L00**

The first of the birds from Hillcrest farm to be captured away from the east side of the wood. It had been ringed on 10/3/2006. We retrapped it again on 30/3/2006, this time at the main feeding station.

Blue Tit **6** **R353205** **03/02/2006** **Treswell village**

Ringed in February 2004 in the south-east corner of the wood and recaptured at a nearby temporary feeder in March 2005.

Blue Tit **5** **T663172** **10/02/2006** **Treswell village**

Ringed in January 2005 in the wood and trapped there again on March 5th, after this capture in Treswell village.

Great Tit **5F** **H230000** **05/02/2006** **D09**

The first of the Treswell village ringed birds to be found in the wood, a mere two days after ringing.

Great Tit **6F** **R353067** **03/03/2006** **Treswell village**

Ringed at the car-park feeding station in February 2003 and not seen since in the wood.

