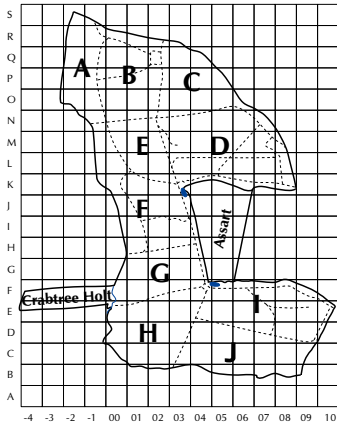


TWITTER



Treswell Wood - Information To Tell Every Recorder

December 2016 Treswell Wood IPM Group
(Integrated Population Monitoring)

Project leaders:

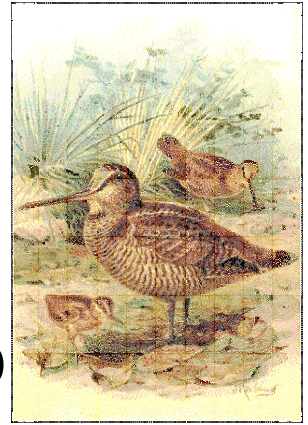
CBC Pat Quinn-Catling

Nest Records Chris du Feu

Ringing John Clark

2016/5

Number 110



All projects by permission of NWT

Our visit on December 18th marked the beginning of the 45th year of the continuous monitoring operations in Treswell Wood - the very first visit having been made on December 17th 1972. This length of time is now just over half the lifetime of John McMeeking who began the work and he continues to be an active member of the ringing team. The 44 completed years is also rather more than the life length of most of the current team.

2016 has been an 'interesting' year in many ways. The total number of encounters is our highest since 2010. Our best measure of abundance, though, is the total number of encounters in standard site nets. Again, this is comfortably above average which, on the face of it, seems encouraging. However, looking at the breakdown of standard site captures through the year, it is clear that the early part of the year brought much larger numbers whereas the last two intervals have yielded somewhat lower captures than usual. This is in line with the national picture where there has been a poor breeding season for many species. The preliminary BTO CES results show 11 species monitored with higher adult numbers than in 2015 and only two with lower numbers. On the other hand, only one species (Willow Warbler) shows increased productivity but 17 show decreased productivity. How this affects our bird populations we cannot tell. With lower numbers, and consequent reduced intra-specific competition, survival could be higher. A bigger factor is likely to be severity of winter weather (and at present we have not seen any prolonged, hard frosts this winter). Time will tell.

The year has seen the launch of our web site thanks to the initiative and hard work of our web-mistress, Amy. We are still feeling our way into its contents. We think it should be there to document our work rather than being a blog-type site full of selfies with rarities in the hand (not that this would happen often, perhaps only one rarity per 40 years). Our archive of issues of Twitter is included, some example CBC maps and some background information. We will soon be including a list of publications which have used data from the wood.

We are always happy to assist students with university project work and at present we have two. Ayrton Cooper, from the University of Nottingham, is to look at various aspects of the annual spring influx of Great Tits. We know it happens, but that is all we know. We have not looked at the timing in relation to weather or population size, the ages or recapture histories of birds or whether the two sexes differ in their timing of arrival. Meanwhile, Russell Barnett from Exeter University will be looking at the phenology of moult in Great Tits.

As usual, the BTO Conference in December provided a great deal of food for thought. Ben Sheldon's Witherby Lecture touched on many things of particular relevance to the Treswell Wood operation. We hope to arrange a visit to Wytham Wood near Oxford early in 2017, in the expectation of gaining ideas for enhancing our work. We wish to look at how they use PIT tags for remote monitoring of birds at feeding stations and elsewhere. We wonder now about looking at nesting success in relation to timing of the nest and also to age of coppice regrowth (something really obvious that we have not looked at). Nicholas Watts (of Vine House Farm bird food) gave an inspirational lecture to the whole conference but his short talk to the nest recorders' meeting made us think of attempting to provide opportunities for Tree Sparrow nesting. The assart, with its hedgerow and ponds, and adjacent to farmland would seem to be well placed to support a breeding colony - the last breeding of Tree Sparrows in nestboxes in the wood was in the mid 1980s. To that end, with permission from the Wildlife Trust, we have installed half a dozen boxes in a cluster along the southern part of the assart hedgerow. We have also installed boxes for Willow Tits along the assart hedgerow. We hope that Willow Tits may find them and use them in relative safety from the depredations of Great Spotted Woodpeckers which seem to have very restricted foraging ranges within the wood. Thanks to Tony Kennedy and his team for converting the pine logs into nesting 'stumps'.

With the start of the New Year comes the call for subscriptions from active members of the ringing team. As usual £20 for ordinary members and £10 for unwaged/student members. Keith, our treasurer, will welcome your contributions - cheques can be made payable to 'TWIG'.

Finally, we must give our thanks to all who have contributed to the project in so many ways over the past year and we look forward to another year of development in 2017.

Annual Summary - All ringing records 2016

	Ctrl.	New Birds			Retraps		Sight	Recvs.	Othr.	Total
		Adult	Juvnl	Pulli	Rt	SDR				
Sparrowhawk	..	.	2	.	.	.	.	.	2
Kestrel	.	1	.	.	1	.	.	.	2	
Woodcock	.	1	.	.	.	.	.	.	1
Stock Dove	.	2	.	.	.	.	1	.	3
Woodpigeon	.	2	.	.	.	.	.	.	2
Tawny Owl	.	.	.	3	1	.	.	.	4	
Barn Owl	.	.	.	3	.	.	.	.	3
Great Spotted Woodpecker	.	2	7	.	19	1	.	.	29	
Swallow	.	.	1	.	.	.	.	.	1
Wren	.	49	58	26	71	13	.	1	218	
Dunnock	.	17	19	.	49	9	.	.	94	
Robin	.	45	77	11	116	39	.	.	288	
Blackbird	.	60	23	.	46	8	.	1	138	
Song Thrush	.	15	6	3	10	1	.	.	35	
Redwing	.	3	5	.	.	.	.	.	8
Blackcap	1	58	17	.	18	11	.	.	105	
Chiffchaff	1	31	6	.	16	6	.	.	60	
Willow Warbler	.	1	1	.	1	.	.	.	3	
Goldcrest	1	31	33	.	25	3	.	.	93	
Spotted Flycatcher	.	1	.	.	.	.	.	.	1
Long-tailed Tit	.	26	11	.	50	2	.	.	89	
Marsh Tit	.	2	7	15	49	5	.	.	78	
Willow Tit	.	.	1	.	6	.	.	.	7	
Coal Tit	.	4	7	11	31	1	.	.	54	
Blue Tit	7	57	76	179	335	30	.	1	33	718
Great Tit	5	29	39	71	304	51	.	1	1	501
Nuthatch	.	3	5	.	26	34
Treecreeper	.	9	11	.	33	6	.	1	.	60
House Sparrow	.	15	6	.	3	24
Chaffinch	.	50	31	7	48	12	.	.	.	148
Greenfinch	.	4	.	.	1	5
Goldfinch	.	5	7	12
Bullfinch	.	19	14	.	27	60
Totals	15	542	470	329	1286	198	.	6	34	2880
Totals in recent years:										
2015	15	443	425	286	1143	224	.	5	46	2587
2014	12	328	470	328	934	135	.	3	36	2246
2013	11	352	439	316	1203	222	.	1	11	2555
2012	27	408	326	221	1149	182	0	7	35	2355
2011	12	462	357	331	1097	160	1	8	38	2466
2010	14	437	499	544	1655	243	1	6	13	3412

Key:

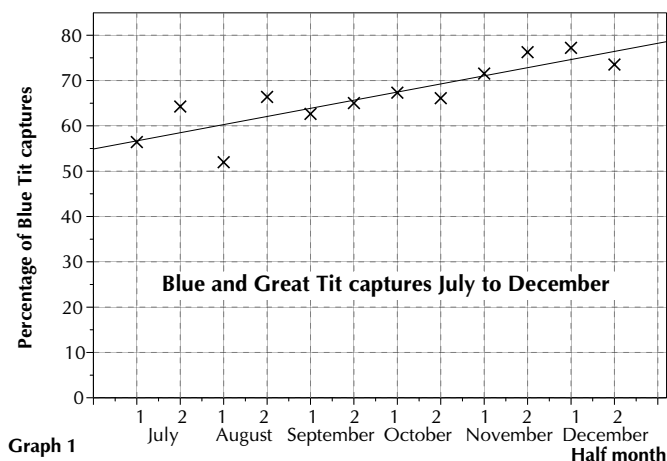
Ctrl - Birds ringed elsewhere and caught in Treswell Wood including all birds from Hillcrest Farm. **Juvnl** - juveniles. **Pulli** - birds ringed as nestlings. **Rt** - ordinary recaptures. **SDR** - same day recaptures. **Sight** - observations of ringed birds. **Recvs.** - recoveries, i.e. our own ringed birds found dead in Treswell Wood. **Othr.** - all in this table are pulli which were ringed but died before fledging; they are not included in the Pulli column.

Blue Tits in 2016

BTO Press releases state that numbers of Blue Tits recorded in gardens this autumn by the BTO Garden BirdWatch were the lowest since 2003. The suggestion is that it is mainly a lack of young birds. Looking back to results of various BTO surveys we see that the GBW reported the lowest number of Blue Tits in August for eight years, the Nest Record Scheme preliminary results and Constant Effort Sites scheme reported the worst breeding season on record. The press release ends by asking what the continuing effect of the dire breeding season will be on Blue Tit numbers in gardens for the rest of the winter and beyond. The poor productivity results from very unfavourable weather for much of the nesting season followed by wet weather in the immediate post-fledging period.

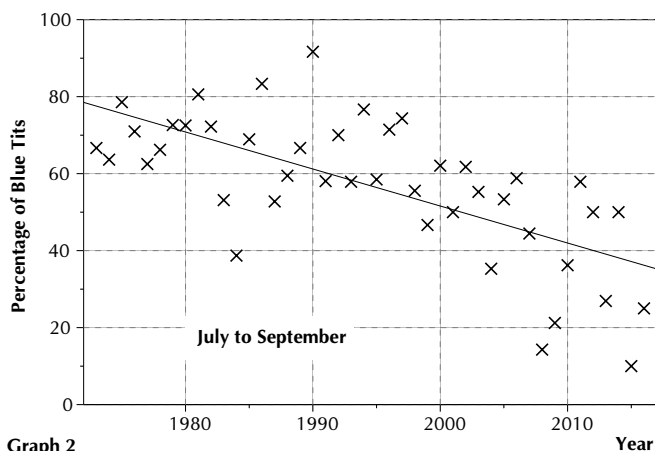
In Treswell Wood we certainly caught very few nestling-ringed Blue Tits for some time after they had fledged. By November 1st we had retrapped only nine of the of 179 which had fledged from boxes. In itself this was not unexpected. For some years we thought that ordinary mist-net captures of recently-fledged Blue Tits were fewer than those of Great Tits - although we had never done any detailed checking of these impressions. For larger proportions of Blue Tits we had to wait until later in the year when we would sometimes catch wandering mixed flocks of, mainly, tits. We speculated that young Blue Tits might feed higher in the canopy than do Great Tits, thereby lessening their chances of being intercepted by mist nets. We have now just scratched at the surface of the problem and it seems our impressions have been

rather coloured by events in recent years when Blue Tits have often been noticeable by their absence rather than their presence. Graph 1 illustrates the proportion of Blue Tit captures out of total Blue and Great Tit captures for all years combined for the last half of the year, divided into half-monthly periods. In the immediate post-fledging period, overall, just over half the captures have been of Blue Tits and this proportion increases steadily towards the year end. What this analysis does ignore, though, is that the populations of the two species have changed over the years with Great Tits becoming relatively more numerous in most recent years. Graph 2 shows the percentage of Blue Tits in the first three months after fledging in each year. It is clear that the proportions of Blue Tits have declined over the years compared to those of Great Tits; this decline is statistically significant. Graph 3 gives the proportions in the last quarter of the year. Although the trend line is, again, downwards it is not a significant relationship. The last few years show a recovery of the Blue Tits - this is in line with the nestbox records. More important is that throughout the time there has been a higher proportion of Blue captures in the last quarter of the year than in the third quarter. Even without controlling for breeding population or other annual effects, it does seem that Blue Tits capture probabilities are lower in the immediate post-fledging period than later on.

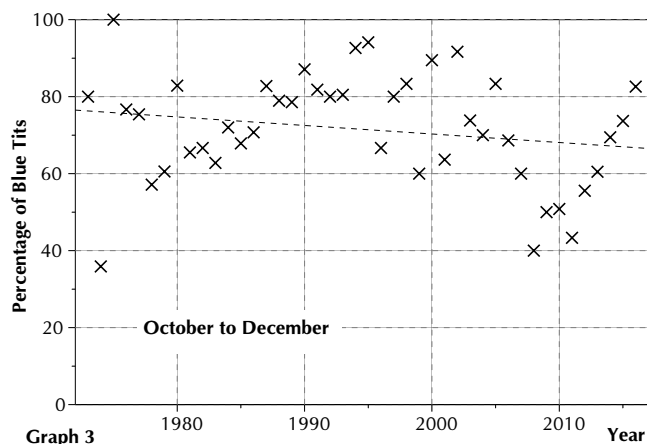


Graph 1

Blue Tit and Great Tit juvenile captures



Graph 2

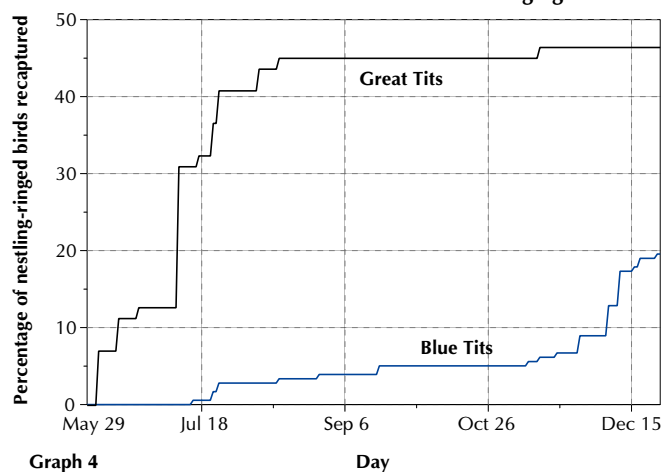


Graph 3

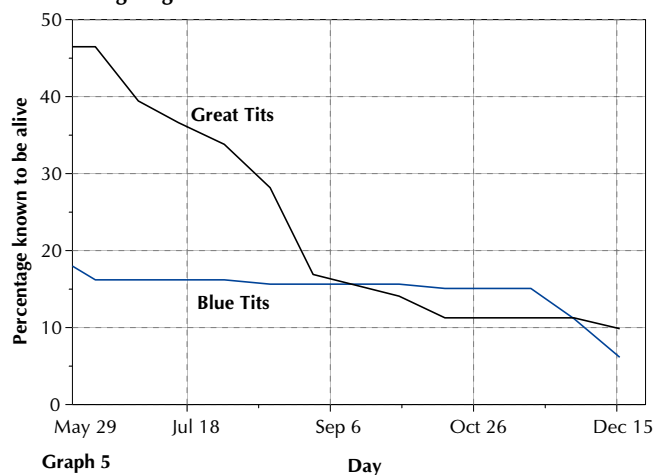
All the above graphs relate only to captures in mist nets at standard sites or other places in the wood not influenced by special attractions such as feeding stations or ponds. Nowadays, for some reason which we do not know, recently fledged Great Tits are caught in good numbers at the feeding station whereas Blue Tits do not come there either as quickly or in such great numbers. Graph 4 illustrates the time of first recaptures of the 2016 nestling-ringed Great and Blue Tits. It can be seen that Blue Tits are conspicuous by their absence in the first few months after fledging. Because so many juvenile Great Tits appear at the feeding station soon after fledging, the gross recapture rate of these nestling-ringed birds is very high indeed - nearly 50%. In contrast, by the end of the year we have only re-encountered just under 20% of the nestling-ringed Blue Tits. However, this is not the whole story.

Graph 5 shows the number of nestling-ringed birds known to be alive through the second part of the year. A bird first recaptured in July and never caught again will only feature in the July totals. On the other hand, a bird first caught in December is now known to have been alive throughout the period so will contribute to all the totals even though, until the end of the year, we did not know it was still alive. This second graph illustrates that minimum survival rates of the two species are not far different from each other. (Minimum survival is the number known to be alive - there are probably more birds still alive in the wood or elsewhere which we have not retrapped.)

Post-fledging re-encounters of nestling-ringed Blue and Great Tits



Graph 4



Graph 5

At the BTO conference, Dave Leech, head of the Nest Records Scheme, noted that we know very little about immediate post-fledging survival of birds. Our Blue Tit data certainly support this view. A place such as Treswell Wood where we ring many nestlings and know their fledging dates to within a few days, and where we carry out mist-netting is ideally placed to discover more about this survival. All we need to do is to catch more Blue Tits in the short, critical post-fledging period. We are not sure how to try to do this but are pretty sure it will involve more use of playback calls (but always well away from standard site nets, of course). What a change from former times is Dave's encouragement to catch more Blue Tits. The first BTO Trapping Guide in 1981 dismissed the idea of trying to catch even more tits 'If sufficient tits are not trapped in all other sorts of trap then ...'

All these superficial analyses do support Dave Leech's suggestion that immediate post-fledging survival is not well known. What is needed is something more rigorous which controls for population size, fledging success and any other factors which influence the number of birds caught in order to understand the immediate post-fledging period for these birds. Offers of assistance welcome.

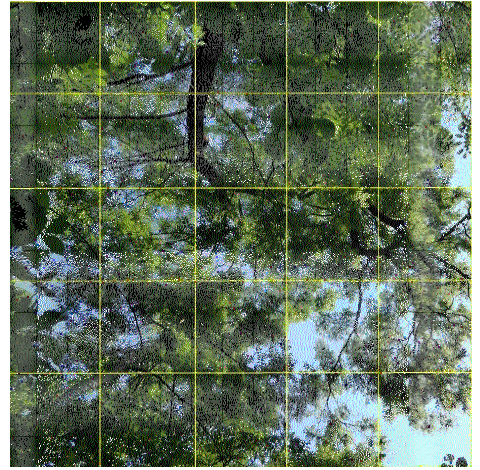
Our first winter night-time round of boxes looking for roosting tits held surprises - of the nine tits found, all but one were Blue Tits. That is quite a contrast to previous years when the roosters have been dominated by Great Tits. On the second monthly visit in December we found 12 birds - all of them Blue Tits. A further big surprise came on December 11th when we put extra nets at the feeding station. Of the catch of 100 birds, 45 were Blue Tits with a niggardly total of only five Great Tits. In December overall, just under half of all captures were of Blue Tits and three quarters of captures of tits were of Blue Tits. Great Tits were outnumbered by Blue Tits by more than 4:1. We do not recall such a massive influx of Blue Tits. In the captures on December 11th, 86% of the Blue Tits were juveniles which is higher than we might expect after such a dire breeding season. In contrast only 68% of the roosting Blue Tits were juveniles - judging from the roosting histories of some of the adults we suspect that a higher proportion of adults roost in boxes than do juveniles. The roost visits also brought another surprise. In November seven of the 10 birds were found in the western edge of the wood and the other three in the east. In December it was just one in the western edge and 10 in the eastern areas. An explanation would be welcome but we doubt if it is likely to be forthcoming.

Where have these Blue Tits come from? It seems there has been a good deal of local movement recently. Of a catch of 51 birds at Hillcrest Farm in the village in mid-December, 21 were Blue Tits. Of these, seven wore Treswell Wood rings and included three nestlings from 2016. Two days later one of the newly ringed Blue Tits at the farm appeared in Treswell Wood.

Finally, on Blue Tits, in discussion with Laurent Demongin I suggested that in some years our juvenile tits seem to have longer wings than in other years. Rather foolish to suggest these things as it then leads to the work of analysis. Yes, it is not just a gut feeling - it is true. I examined wing lengths of all Blue Tits in Autumn after moult had been completed to ensure wings were full length but before the wings would have become shorter through abrasion. There is significant between-year-variation in Blue Tit wing lengths. It was not a surprise to see that adult wing lengths were, on average, 1mm longer than those of juveniles but what was unexpected was that adults and juveniles did not necessarily have long or short wings in the same year. On reflection this may not be surprising. Juveniles grow their wing feathers in the nest when being fed on a diet of caterpillars. Adults grow their new plumage after the breeding season with a different diet and when weather conditions and food supply may be quite different. It is known from Ted Cowley's work on Nottinghamshire Sand Martins in the 1970s and 1980s that conditions during the moulting season can result in wing lengths varying greatly between years. All we have to do now is look at the wing lengths in relation of conditions at the time of feather growth. Any volunteers?

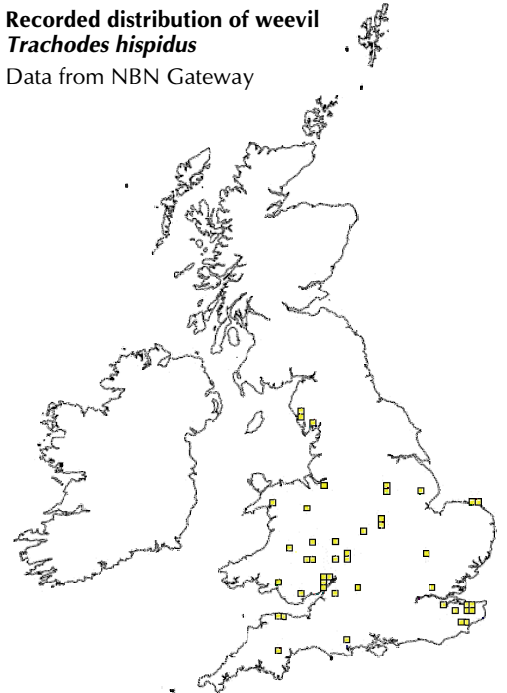
Frass

Ken Smith has worked through our season's frass samples. He sends his thanks to all who have helped in the collection. As usual, the trees in the wood produce much less frass than those in pure oak woodland. We now have six years' worth of data - it will soon be enough for a study in its own right in addition to being used as part of Ken's wider studies of bird breeding phenology. We think that our low frass production is a result of ash trees not having many caterpillars. We wonder how ash dieback will affect overall caterpillar crops and also wonder if (and how) we could attempt some systematic recording of the spread of ash dieback in the wood. Any ideas? We also wonder whether, and how, to record leafing dates and whether we could use some standardised method of photography to record leaf canopy cover at the frass traps. We did take one experimental set of photographs of the canopy above the frass traps last year which may show the way forward. The photograph shown is the view of the canopy taken from one frass trap late in the nesting season. The grid superimposed allows a coarse estimate of canopy cover in each cell to be made very rapidly, each perhaps on a scale of 0-4, and the sum of these scores gives an overall percentage cover. I suppose the process could be automated with modern digital technology given programming expertise. Obviously the procedure needs to be standardised to ensure that the measurements are made at the same leafing state each year. We also wonder whether the existing set of fixed point photographs now made at each standard site visit may be useful in measuring leafing dates. The photograph series now stretches back to 2013.



Recorded distribution of weevil
Trachodes hispidus

Data from NBN Gateway



Ken also found a small weevil amongst the frass *Trachodes hispidus*. Species records are always welcome. This particular one appears to be rare - the map showing its known distribution is downloaded from the National Biodiversity Network Gateway (www.nbn.org.uk). Whether it is rare or (as so often for many species) just rarely recorded we do not know.

Noteworthy Encounters

Species	Age/sex	Ring	Date	Grid
Woodcock	4	EL01990	27/11/2016	E02

This is the first Woodcock we have caught since 2010 and only the 18th we have ever ringed. We had seen several in the wood during November and December - six were flushed during one nestbox repairing visit. It would appear to be a good winter for them in the wood. Of our 18 captures, 10 have been of adults and the others nestlings. We have not retrapped any but four have been recovered - all shot within North Nottinghamshire. We are often told that winter shooting of the 'game' species does not deplete our breeding population because it is only wintering birds which are shot. This is not entirely true - one of our four recoveries was of a nestling-ringed bird and it takes some stretch of belief to call it a wintering migrant. (Chris Packham has begun an on-line petition to Parliament to debate a moratorium on Woodcock shooting <https://petition.parliament.uk/petitions/167410>)

Blackbird	2	LE35209	9/11/2016	L06 remains found.
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This bird was ringed in May 2015 as a breeding female and last retrapped in January 2016. The circumstances of the recovery are not completely understood - just a leg with ring resting on top of a nestbox. We have sometimes found dead birds, or other animals, in nestboxes (including Noctule bat, Water Shrew and Robin) which we presumed had been killed by a weasel and stored in a larder. We not infrequently find Tawny Owl pellets on top of nestboxes but it is not clear if they have been dropped from a perching owl above the box or by an owl perching on the box. It seems unlikely, though, that a Tawny Owl would leave just the leg with ring as they are not noted for dismembering prey in the way that raptors do. At least we know the length of life of this bird and its place of death even if we do not know the exact circumstances of death. The purpose of ringing birds is to accumulate information about their lives and deaths. The ring used on this bird has done its job.

Song Thrush	4	RW58252	18/12/2016	H02
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We continue to catch an unusually high number of Song Thrushes for the time of year - the previous issue of Twitter described this. This thrush has a retrap history, having been ringed in May 2013, recaptured in November

relation to age. John McMeeking wonders whether such photography may also show up other consistent small differences between adults and juveniles which have not previously been detected in the complexity of Treecreeper plumage.

Goldfinch 3 Z782630 18/12/2016 H02

This is the 12th Goldfinch caught this year - which makes 2016 a better year than the previous two. Prior to that we had enjoyed over a decade of higher numbers of the species after a complete absence of the species from 1987 to 2001. We have not always found the species easy to age or sex and are delighted to note that Demongin's guide agrees. We were confident that this bird fell into the intermediate category of birds which are best left unsexed.

House Sparrow 3M TT49282 11/12/2016 Q03

Demongin's ageing and sexing guide strikes again. Until now we thought that House Sparrows were unageable after the autumn moult because both adults and juveniles undergo a complete moult. Demongin, though, described a plumage difference for males. Juveniles have the distal half of the median coverts white with black shafts whereas adults have these coverts almost completely white with no black in the distal part of the shaft. There is also a difference in the alula. This House Sparrow was the first we have ever captured that we have been able to age as a juvenile (code 3) after its post-juvenile moult.

10-Week Summary: 2016 Interval 5, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Sparrowhawk	.	.	1	.	.	.	1
Wren	.	.	4	5	.	4	13
Dunnock	.	.	.	2	.	1	3
Robin	.	.	5	5	.	8	18
Blackbird	5	.	4	3	.	1	13
Song Thrush	1	.	4	.	.	.	5
Redwing	.	.	1	.	.	.	1
Goldcrest	3	.	7	1	.	3	14
Long-tailed Tit	7	.	.	17	.	.	24
Marsh Tit	.	.	.	1	.	.	1
Blue Tit	.	.	1	3	.	1	5
Great Tit	.	.	.	2	.	1	3
Treecreeper	.	.	.	1	.	.	1
Chaffinch	1	.	.	1	.	.	2
Bullfinch	1	.	2	.	.	2	5
Totals	18	.	29	41	.	21	109

Treswell Wood Standard Site Totals in 10-week periods - Summary table

Summary Data since standard site netting began in 1978:

Interval	1	2	3	4	5	Total
Maximum	128	185	288	253	177	864
Minimum	57	33	89	66	59	364
Mean	90	111	159	130	124	609

10-year Averages since standard site netting began in 1978:

1978 - 1987	90	113	182	140	130	655
1988 - 1997	86	107	170	149	127	637
1998 - 2007	95	100	134	120	125	574
(2008 - 2016)	91	126	149	104	115	561