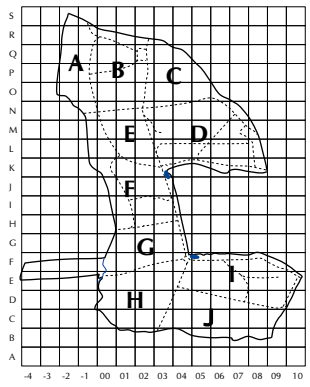


TWITTER

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

March 2012 Treswell Wood IPM Group
(Integrated Population Monitoring)

All projects by permission of NWT

Project leaders:

CBC Pat Quinn-Catling

Nest Records Chris du Feu

Ringing John Clark & John McMeeking

2012/1
Number
86

The first two months of the year yielded generally low captures - though not unprecedentedly low. Goldcrests were notably infrequent. The largest numbers were of the tits - Great Tits in particular, with more trapped as the spring arrived and we enjoyed the usual influx of birds. Treecreepers do not appear to have done well but, in fact, we have captured respectable numbers (including several new individuals) in non-standard site nets. Weather has been less helpful than usual with two weekend visits impossible because of rain, and fewer visits to nestboxes for roosting birds because of heavy snow.

Perhaps the biggest and most important event was not in the wood at all - the conference. Richard Anderton reports on this in full below. Many thanks to all involved in any way - organisers, caterers, speakers and attenders. The bookstall raised over £70 for our funds and will raise more for the BTO when we pass on the unsold books. Thanks to all donors and purchasers.

The illustration at the head of this issue is our Treecreeper logo, now encircled by the group name - as it appeared for the first time on the conference programme. This is also as it will appear in the Treecreeper account in the BTO Atlas which the group has sponsored. Many thanks to all who contributed to our appeal which did finally reach the £2,000 target.

Paul Eady and Mark Edwards of Lincoln University have begun a project which we hope will lead to studies relating to optimal foraging theory. To this end we are colour-ringing Blue Tits during the nesting season in the northern part of the wood. Birds will carry two differently coloured rings on the left leg and one colour (most will be yellow) below the metal ring on the right leg. Any sightings of these birds would be welcome.

Common Birds Census 2011

The CBC results for 2011 are given below. As usual they are broadly comparable with the ringing but with the typical detail differences which are expected from independent surveys using such different methodologies. Woodland residents including Great Spotted Woodpeckers, Robins and Blackbirds were low in numbers; warblers also low except for Chiffchaffs. Blackcaps were more abundant than in early years, but as with ringing, 2011 was not quite as good as other recent years. Great Tits had a good year and the Nuthatch total is the highest yet. It is excellent to see the record of a Buzzard territory - it would be even better if we knew its nesting site. The ringers caught no Willow Tits for the second year running so it is good to see that they were, at least, heard by the CBC observers.

The CBC team is seeing a number of changes. Richard Johnson and Liz Tillotson have now retired after many years of service. We are deeply indebted to them for their long service. Richard Thewliss who analysed maps at the BTO has now moved on and the 2011 maps have been prepared instead by John Marchant. One excellent outcome of the conference was that the BTO has recognised the value of our long-term, integrated operations and has agreed to continue to analyse the CBC observations for us. Many thanks to Andy Clements for agreeing to support us in this way.

Treswell Conference - report by Richard Anderton

Being a new member of the Treswell team, I was honoured but slightly nervous when John and Chris first asked me to write this article. The 40th year of work in the wood is quite a milestone. However the conference itself was such an interesting, enjoyable and informative day, that it was easy to illustrate the immensity of the history and importance of the wood while putting a younger person's perspective on it all.

It was fitting that John McMeeking gave the words of welcome. His role in acquiring the wood for the Nottinghamshire Wildlife Trust (NWT) and his efforts in starting the ringing programme have led to many important things - as we heard later. A great thank-you to John.

The first time I visited Treswell wood I was amazed at what a fine example of an ancient semi-natural woodland it

was - but I did not realise the great efforts that are made by the NWT to achieve this. Rob Atkinson gave an excellent account of the management objectives and the associated work aiming to maintain and enhance the biodiversity of Treswell. The importance of dead wood - which provides micro-habitats for a diversity of saproxylic species directly, which in turn provides important ecosystem services and support to other woodland species - was outlined. Similarly a diverse age structure within the wood, from open ride areas through short rotation and long rotation coppice, to mature woodland, is maintained in order to provide a mosaic of habitats benefiting a range of flora and fauna. Dr Andrew MacColl of Nottingham University would later explain how his research has shown the importance of a diverse coppice age structure to bird abundance.

As a new recruit to the Treswell ringing team I have only been subject to relatively few early mornings in the wood, a minute fraction of the total number seen by the group. Therefore I can only comment on short term trends such as the unusually high number of Sparrowhawks but low number of Great Spotted Woodpeckers caught since I have been attending. (Both of which are a privilege to handle and ring, although I have come to realise the rest of the group are only too pleased to pass on such birds to the new trainees because of their ability to draw blood.) However from John Clark's talk I was staggered at the mass of data compiled over the 40 years of ringing in Treswell, and how much we can learn from such data. Sadly data have shown a decline in the numbers of Willow Warblers and Willow Tits. Both these declines mirror the national trend. However there is a much brighter outlook for Treecreeper, Nuthatch, Blackcap and Chiffchaff with a gradual increase in the number of captures of these species. Special mention should be made of Treecreeper 5Z1452 who made it to at least 7 years 280 days of age and was reported as being in excellent condition on its last ever capture. (I can't help but wonder if he relocated to Gainsborough while clinging to Neil's trousers.)

There have been some interesting movements of birds to or from Treswell Wood including a Great Tit from Shropshire, a Chaffinch to Utrecht, Song Thrushes to France and one from Helgoland, Redpolls to and from Belgium and Blackcaps to Morocco and Spain and from Belgium - results which help improve our understanding of dispersal and migratory movements. It is obvious the power of a 40 year data set is huge and has improved our knowledge of identifying, ageing and sexing birds, and has also provided data for studies including the mite burdens on Robins.

Like ringing, the Common Bird Census (CBC) has been conducted in Treswell since the NWT bought it, providing data on the number of breeding territories for a range of species over the years. Richard Johnson took us through the methodology used, provided examples of the territory maps produced and let us in on some of the interesting things he has observed during his 18 years of CBC in Treswell.

One of Richard's most amusing stories was of how he learnt the call of a quail. After coming across two Song Thrushes on the edge of their territories singing loudly and mimicking other birds, a German student studying bird song asked 'Did you hear the quail mimicry?'. I bet Richard never thought he would learn bird song by a German pointing out calls through a Song Thrush; I think I might stick to the CDs.

Richard has now stepped down from the CBC team and I am sure I can speak for everyone associated with Treswell when I say a big thank-you for his efforts over the past years.

Chris du Feu's years of birding experience has allowed him to gain expert knowledge on the preferred nestbox design and positioning for many bird species. However the birds in Treswell still surprise us, such as the Nuthatch which decided to ignore the purposely positioned high boxes and nest in a low nest box last year. The efforts of the nest recorders have provided us with 3,334 nest records of 37 species over 30 years in Treswell, which is an incredible data set. So much can be learnt from such records, such as trends in breeding success in different species, and it was interesting to see that the nesting season has advanced by 2 weeks over the 30 years, which mirrors the national picture.

Chris is always looking to learn more, with ongoing projects such as relating caterpillar abundance to breeding success in Great Tits and Blue Tits; early results suggest there was a mismatch in times of peak abundance and greatest food demand by nestlings during 2011. Other projects include determining whether 'deloused' boxes improve breeding success, and whether Blue Tits have preferences for different coloured nesting material. A project for the future could be a complete study of all the fauna found within the nest boxes.

Dormice were re-introduced into Treswell Wood in 1995 and I think we all keep a watchful eye for signs of this species when walking around the wood. Chris Holliland gave us a talk on the ecology of this species and what we should really be looking for. Dormice are indicators of well managed, high quality habitat. As they are found at low density they require large woodlands, with a diverse structure, typically cut on 15-20 year rotation. A diverse structure ensures plenty of flowers, fruit and caterpillars on which they feed, and provides suitable nesting locations. Therefore it would appear Treswell is a suitable location for dormice, however only one nest has been seen recently despite the provision of nest boxes and tubes. Perhaps this is because Treswell is situated on the northern edge of its range as they generally prefer warmer, south west conditions or, perhaps, that the dormice released were bred in captivity and referred to by Chris as 'fat and stupid' (perfect prey for our resident Tawny

Owls). Despite this not-very-successful attempt to re-introduce dormice to Treswell, many lessons have been learnt and a second re-introduction could be on the cards; let's hope we have more joy this time.

The afternoon provided the chance for everyone to hear about scientific research being done with the Treswell data set. Charles Deeming of Lincoln University described a couple of his projects using the Treswell nest record data such as the breeding biology of tits in Treswell. Interestingly data analysis shows that although Coal Tits, Great Tits and Blue Tits are closely related and are found in the same habitat they have different reproductive patterns. Coal Tits have most losses at the egg stage, and therefore lay many eggs and those that do hatch do well. In contrast Great Tits have most loses at the chick stage and have a smaller clutch size but struggle to raise all the chicks to fledging. Blue Tits appear to be an intermediate between the two. Future studies we can look forward to from Charles include the effect of coppice age on reproductive success of tits and on the diversity of breeding territories.

Andrew MacColl of Nottingham University is interested in the relationship between coppice age and bird abundance and composition; Treswell provides a large data set for this study because each capture of a bird can be linked to the age of coppice where it was captured. Results are interesting; some birds showed no association with coppice age (Chaffinch and Robin), some were associated with younger coppice and referred to as 'peakers' (warblers), some were strongly associated with open areas and referred to as 'decliners' (tits) and some had 'complex' associations - such as the Blackbird which avoided areas of dense re-growth but was found in a variety of other age classes. Variation could also be seen across season and age class within species. A mosaic of age structures is essential to provide for a high diversity of birds.

You may have noticed that I have not yet mentioned Andy Clements' keynote talk 'Where does Treswell fit into the scheme of things?'. This is because I felt his words were very appropriate to sum up the importance of Treswell within the bigger picture. The British Trust for Ornithology (BTO) is a charity which prides itself on evidence-based scientific research, in which ringing, the CBC and nest records contribute to the understanding of seasonal movements and population changes of birds. Treswell Wood is a fine example of a site which has provided long term, consistent integrated data for such work by the BTO, but also for other scientific research carried out by local universities. The support given by the NWT to ongoing research is an integral part of its success, and it is evident woodland management works have had a very beneficial effect on the biodiversity of the woodland.

Of course all of this would not be possible without the active, engaged, passionate people who dedicate their time and effort to projects within the wood. I think it is testament to everyone who has been involved with Treswell that Andy stated the BTO would love to see another 10 or 12 Treswell Woods across the UK.

I want to thank everyone who was involved in organising the conference, all the speakers and the caterers for a truly great day. I look forward to many more successful years at Treswell.

Richard Anderton - trainee ringer

Conference Outcomes

One aim of the conference was to give us a chance to consider how we can best direct and make use of our work in the future. The notes below result from the final session led by Ken Smith (chairman of BTO Ringing Committee and our 'frass' man). These notes do not always include suggestions about who might do these things. Volunteers will be welcome.

- We should continue with ringing including the constant effort work, territory mapping (CBC), nestboxes, frass collection.
- NWT and BTO are keen to produce, with our help, a presentation about Treswell Wood which could be used to encourage more such operations.
- Habitat documentation: can we produce historic and current maps to show agricultural land use adjacent to the wood?
- Species recording: can we make more formal recording of other species data and more formal recording of woodland structure? How could we record deer activity systematically? Can we arrange butterfly surveys? Are there local groups (naturalist or history groups, perhaps, or county recorders) that might be useful to involve in other species recording? Should we arrange a Bioblitz type event?
- Student involvement - we would like to make best use of our data for student work. Charles Deeming is keen to co-operate in this. (Another nest lining project is now taking place with Mark Edwards.)
- Coppicing and pigs - is there any evidence that pigs have influenced habitat? This could be a student project - we do have data for where and when pigs were used as habitat managers.
- Habitat recording through fixed point photography. We should try and do this. We will try to start by taking photographs at standard net sites during mist-netting visits.

- Ringing demonstrations were suggested. The ringers feel the wood is not suitable for ringing-only demonstrations as we cannot rely on sufficient birds being caught on any particular occasion. However, ringers are happy to (and do) welcome visitors to normal ringing sessions and are happy to arrange ringing as part of wider woodland open days organised by NWT.
- Publicity for the group can happen through the Wildlife Trust – ideas to Charles Langtree.
- Photograph collection. This needs to be catalogued and organised. Old pictures need to be digitised. The aim would be to make images easily accessible for displays and presentations.
- Species list - casual non-bird records from field sheets need to be copied from text documents into a more structured database format.

Noteworthy Captures

Species	Age/sex	Ring	Date	Grid
Kestrel	**5M**	**EL87440**	**8/1/2012**	**K01**

After catching a Kestrel towards the end of our last visit of 2011 we were surprised to catch another one so soon. It was a new individual rather than being of our home-grown birds (which we have not heard from yet).

Great Spotted Woodpecker 5M CT84464 12/2/2012 E07

We caught fewer of this species in 2011 than in previous recent years; the CBC record also shows a lower population. This bird is one of only two that we have trapped so far this year. Of the few birds handled since last summer, some have been ageable as first winter birds because of incomplete moult of greater, median or lesser coverts. It seems that the proportion which can safely be aged as first winter varies from year to year - depending on the extent of moult - and that probably varies with the timing of the breeding season, food supply and earliness of onset of autumn. As usual, any birds not clearly ageable as first winter must be aged as unknown, code 4.

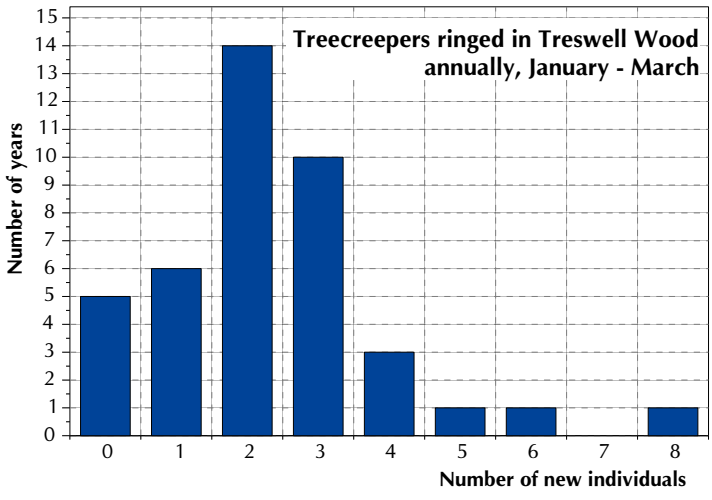
We have continued to measure bill length and depth on these birds for Ken Smith's study. The written instruction sheet in the wood states clearly that the bill length should be measured to the skull. For some reason, recently we have been measuring to the nostril instead. The bill-to-skull measurement is much simpler and much more reliable, so please measure to the skull from now on.

Song Thrush 6 RS78294 29/1/2012 E02

This bird is the first of the year - heralding spring - although it arrived a few days before the snow struck the area. Treswell Wood Song Thrushes have always appeared to be summer visitors with almost no winter captures. We had assumed that they 'migrated' fairly locally - perhaps as far as nearby villages. However, a look at records of movements of the species to or from the wood suggests that they may be generally fairly long-distance migrants. We have only three records of local movements, in spite of the number of ringers operating in North Nottinghamshire. However we have seven records of movements to-or-from more distant places; four within England, two in southern France and one in Helgoland. All of these were trapped in the wood during the breeding season and found elsewhere during winter. It does seem, therefore, that our conception of our Song Thrushes making generally small winter movements is unfounded.

Treecreeper 6 CXN122 11/3/2012 J02

This is the oldest of the 13 individuals we have captured this year so far - ringed nearly two and a half years ago. Treecreeper numbers seem to be a little down on normal - whether you look at CBC or ringing records. However, this spring's captures have included a much larger than normal number of new birds, some adults and some in their first winter. Typically we ring just two new Treecreepers in the first three months of the year; this year we have ringed six - a number equalled or exceeded only in 1973. (It was not surprising that so many new Treecreepers were ringed in the spring of 1973 because only one bird had previously been ringed during the first ever mist-netting visits of December 1972.) The figure shows the distribution of numbers of new individuals ringed each spring since ringing began - clearly 2012 is an exceptional year. It seems, then, that Treecreepers are moving into the wood to fill vacant territories.



Coal Tit **6** **V053971** **11/1/2012** **Q02 Feeder**
An old friend, ringed in October 2006 and captured at least once each year thereafter - its previous capture was almost exactly a year before this one. At 5 years and 3 months this is a respectable age for such a small bird.

Great Tit **6M** **R558493** **11/3/2012** **H02**
The oldest Great Tit caught so far this year - ringed as a juvenile 5 years and 8 months earlier in August 2006. This is its first recapture since November 2010.

Goldfinch **L731055** **6M** **18/1/2012** **Q02 Feeder**
Goldfinches are becoming more abundant locally - possibly helped by the provision of niger feeders. We have now caught 10 individuals in the wood this year - exceeding the total catch in almost every year and well above the overall average of two birds per year. This was the first retrap of the year - having been ringed in April 2011. A second one already with a ring is noted in the Hillcrest Farm movements below.

Controls and Recoveries

The Hillcrest Farm collection
Several birds have travelled between Hillcrest Farm and Treswell Wood during the early spring movements of birds which happen when birds are finding and settling into their breeding territories. The complete table of this year's travellers is below.

Species	Ring	Age at ringing	Treswell Wood Capture	Hillcrest Farm Capture
Blue Tit	**L731342**	3	25 - 9 -2011 → 22 - 1 - 2012 ←	11 - 1 - 2012
Blue Tit	**X497695**	5	12 - 5 - 2010 ↓ ← 16 - 1 - 2011 ↓ 12 - 2 - 2012	19 - 1 - 2010
Blue Tit	**X497963**	3J	14 - 3 - 2012 ←	22 - 8 - 2011
Blue Tit	**X497967**	3J	22 - 3 -2012 ←	1 - 9 - 2011
Blue Tit	**V666943**	1	16 - 5 - 2010 ↓ 16 - 2- 2011 →	11 - 1 -2012
Blue Tit	**X649395**	5	7 - 2 - 2010 →	11 - 1 -2012
Great Tit	**X497917**	3J	26 - 2 - 2012 ↓ ← 14 - 3 - 2012	19 - 7 - 2011
Great Tit	**L731500**	5F	14 - 3 - 2012 →	22 - 3 - 2012
Great Tit	**L803033**	5F	14 - 3 -2012 ←	13 - 3 -2012
Great Tit	**TJ49774**	1	25 - 2 - 2010 ↓ 20 - 11 - 2011 → 22 - 1 - 2012 ←	11 - 1 - 2012
Great Tit	**TR47914**	1	10 - 5 - 2011 ↓ 12 - 6 - 2011 →	11 - 1- 2012
Goldfinch	**X497969**	3J	26 - 2 - 2012 ←	1 - 9 - 2011

Treswell Wood CBC - Numbers of territories - 2011 Results

	5-year averages							
Species	**76...80**	**81...85**	**86...90**	**91...95**	**96...00**	**01...05**	**06...10**	**2011**
Mallard	0.2	0.0	0.2	0.0	0.0	0.5	0.3	1
Sparrowhawk	0.0	0.4	0.4	0.8	0.8	0.6	0.5	1
Buzzard	0.0	0.0	0.0	0.0	0.0	0.2	0.7	1
Kestrel	0.6	0.2	0.0	0.0	0.4	0.7	0.5	1
Red-legged Partridge	0.2	0.0	0.2	0.0	0.0	0.0	0.2	0
Grey Partridge	2.4	0.0	0.0	0.0	0.0	0.2	0.2	0
Pheasant	8.2	4.7	8.0	6.4	6.0	8.6	8.0	8
Golden Pheasant	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0
Moorhen	0.8	0.8	0.6	0.4	0.0	0.3	0.0	0
Woodcock	2.0	1.8	0.8	0.2	0.2	1.0	1.1	p
Stock Dove	0.6	0.2	0.0	0.0	0.4	7.0	3.1	4
Woodpigeon	0.0	1.0	0.3	0.0	nc	nc	nc	nc
Collared Dove	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0
Turtle Dove	7.6	1.4	0.2	0.0	0.0	0.3	0.0	0
Cuckoo	5.0	2.4	1.4	0.4	0.4	0.5	0.2	p
Barn Owl	0.0	0.0	0.0	0.0	0.0	0.2	0.1	0
Tawny Owl	1.4	2.6	1.8	1.2	1.4	3.0	1.4	1
Green Woodpecker	0.0	0.0	0.0	0.0	0.4	1.6	2.2	2
Great Spotted Woodpecker	1.6	3.6	2.4	2.4	2.4	5.6	6.8	4
Lesser Spotted Woodpecker	0.0	0.8	0.2	0.0	0.0	0.0	0.0	0
Skylark	0.0	0.2	0.0	0.1	0.0	0.5	2.0	3
Swallow	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0
Pied Wagtail	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0
Wren	59.4	55.8	69.0	71.8	81.8	76.4	72.8	54
Dunnock	27.2	23.8	22.2	13.4	12.6	8.4	10.6	7
Robin	58.4	60.4	46.6	48.0	54.0	81.4	73.2	51
Wheatear	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0
Blackbird	35.0	29.0	28.4	20.2	25.2	27.0	33.6	19
Song Thrush	29.6	23.6	16.8	7.2	5.6	6.8	10.2	5
Fieldfare	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0
Mistle Thrush	0.2	0.4	0.6	0.6	1.0	2.8	3.8	p
Lesser Whitethroat	0.4	0.2	0.2	0.0	0.0	0.0	0.0	0
Whitethroat	5.6	1.6	1.8	0.0	0.4	0.2	0.1	1
Garden Warbler	15.0	15.4	9.4	4.4	7.2	6.8	3.0	1
Blackcap	15.4	12.4	20.4	20.6	25.4	27.2	25.8	18
Chiffchaff	14.8	8.2	8.6	15.8	19.0	18.6	21.2	27
Willow Warbler	27.6	44.0	31.4	18.2	6.8	5.0	4.3	4
Goldcrest	0.2	0.6	0.4	0.0	0.6	0.4	0.1	p
Spotted Flycatcher	1.6	3.0	1.8	0.2	0.0	0.3	0.2	0
Long-tailed Tit	3.4	3.0	3.6	4.8	5.0	8.2	6.2	2
Marsh Tit	1.6	0.5	1.0	2.2	4.2	2.1	1.1	3
Willow Tit	3.0	1.8	2.4	2.8	2.6	2.5	0.6	p
Coal Tit	2.0	2.6	2.0	6.2	7.4	6.4	4.4	5
Blue Tit	32.8	60.2	67.2	59.2	70.0	50.6	44.2	42
Great Tit	13.4	26.8	36.8	31.8	35.2	46.8	34.8	52
Nuthatch	0.0	0.4	0.4	1.0	1.2	1.2	3.0	6
Treecreeper	2.0	1.8	4.0	3.4	3.6	3.1	2.4	1
Jay	3.2	3.6	2.4	1.4	1.0	1.9	1.7	2
Jackdaw	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
Carrion Crow	1.0	0.0	0.2	0.2	0.8	0.7	1.2	p
Starling	5.2	4.8	1.0	0.0	0.0	0.1	0.0	0
House Sparrow	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0
Tree Sparrow	21.0	10.8	0.0	0.0	0.0	0.0	0.5	p
Chaffinch	33.4	38.4	39.0	39.0	40.6	48.8	45.0	47
Greenfinch	1.4	0.8	0.2	0.2	1.8	0.7	0.5	0
Goldfinch	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0
Linnet	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0
Redpoll	3.6	0.4	0.0	0.0	0.0	0.0	0.0	0
Bullfinch	5.4	3.2	3.0	1.4	0.6	1.8	2.0	p
Yellowhammer	1.8	1.4	0.4	0.4	0.4	0.2	0.2	0
Reed Bunting	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0
Total territories	**457.4**	**457.0**	**437.6**	**386.2**	**426.8**	**464.8**	**427.6**	**363**

Notes: p - present but too few observations to determine any territory. nc - not counted

10 Week Summary 2012 Interval 1, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Wren	.	.	.	1	2	.	3
Dunnock	.	3	.	1	.	.	4
Robin	2	.	.	.	.	.	2
Blackbird	.	4	.	2	.	.	6
Song Thrush	1	.	.	.	.	.	1
Goldcrest	.	1	.	.	2	.	3
Long-tailed Tit	.	.	.	11	.	.	11
Marsh Tit	.	.	.	2	.	.	2
Blue Tit	.	1	.	7	2	.	10
Great Tit	1	3	.	15	4	.	23
Treecreeper	.	1	.	1	.	.	2
Bullfinch	1	.	.	.	1	.	2
Totals	**5**	**13**	**.**	**40**	**11**	**.**	**69**

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

Year	1	2	3	4	5	Total
1978	101	130	243	223	131	828
1979	97	115	211	109	123	655
1980	86	102	210	147	170	715
1981	102	110	288	187	177	864
1982	66	113	165	89	110	543
1983	82	139	143	185	128	677
1984	91	114	110	82	106	503
1985	103	88	135	118	88	532
1986	77	104	153	68	141	543
1987	95	112	196	209	124	736
1988	92	143	180	137	119	671
1989	124	137	282	145	103	791
1990	99	145	204	130	175	753
1991	65	57	98	74	127	421
1992	64	64	115	224	159	626
1993	81	70	112	158	126	547
1994	88	110	212	155	157	722
1995	91	124	240	253	104	812
1996	95	121	128	116	97	557
1997	59	99	126	98	98	480
1998	78	84	116	80	106	464
1999	88	96	140	113	163	600
2000	75	106	106	159	170	616
2001	57	33	94	121	59	364
2002	85	89	141	176	117	608
2003	117	116	146	104	114	597
2004	103	128	126	165	132	654
2005	107	140	150	88	133	618
2006	128	98	185	125	166	702
2007	107	110	138	73	92	520
2008	125	130	151	86	100	592
2009	57	130	156	85	80	508
2010	94	100	144	119	143	600
2011	96	112	120	105	101	438
2012	**69**					