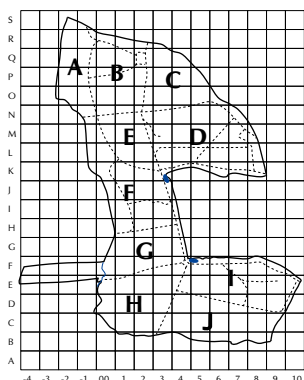


# TWITTER



Treswell Wood - Information To Tell Every Recorder

August 2006

**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 McMeeking



**2006/3**

**Number 58**

Perusal of the constant effort capture totals shows that some species - Robins in particular - have enjoyed a good breeding season. This is in contrast to our nestbox breeders which have suffered massive predation. It seems other species may have suffered too - Great Spotted Woodpeckers included. The hot weather and lack of rain in July have made it difficult to find drinking water. This has provided opportunities for mist-netting at the pond which have been better than at any time since the drought of 1976. So far our captures have been mainly of tits. This is unlike the 1976 captures which included many more finches. We are unlikely to see the numbers of Redpolls - or Tree Sparrows - that were seen in those days. Blue Tits suffered their worst nestbox breeding season ever, Great Tits did rather better. One feature of recent captures has been the relative abundance of juvenile Great Tits, including many unringed. We have also enjoyed a larger than usual number of Marsh and Willow Tit juveniles and a number of species which we catch only infrequently (although enjoyed is perhaps not quite the most appropriate word to describe the Woodpigeon haul). Song Thrushes seem to be present in greater numbers than recently and this has been commented on by the CBC team too.

Although we have been recording events in nestboxes for nearly 30 years, every year brings first-time events. This year's have included the first face-to-face meeting between nestbox inspector and weasel; a nesting Tawny Owl first ringed elsewhere; a bird nest taken over by ants and a strange outbreak of single tit eggs being laid in boxes with no nest. It is possible that some of these were laid by birds whose nest had been destroyed by predators during the egg laying process and they were forced to lay their next, already formed, egg somewhere else.

We continue to collect used nests for the National Nest Reference Collection and for use in student projects in Lincoln University. The latter nests are being used to compare the insulating properties of nests of different species and relating this to the 'attentiveness' of that species at the nest. Insulating properties are being measured by timing the cooling of artificial eggs in the nests. We look forward to hearing of results.

Another project in which we expect we will be able to co-operate will be studying partial migration of Robins. In addition to a Scottish site, a study site was needed in England where Robins are already well documented. Ours is the only Robin RAS project so, when Steve Redpath asked the BTO for a suitable site, we were top of a short list of one. The details we have so far are:

*Migration decisions in a changing world - mechanisms and consequences.*

*Supervisors: Steve Redpath (CEH), Justin Travis (Aberdeen University), Shelley Hinsley (CEH) & Calvin Dytham (York University).*

*There is increasing evidence that many species are adapting to climate change by altering migration strategies but the mechanisms and consequences of such changes are poorly understood. A common strategy among a variety of taxa, including 60% of European birds, is partial migration, where some individuals within populations over-winter on breeding sites, whilst others leave. This strategy presents an ideal model for developing a mechanistic understanding of migration as it allows for comparison at an individual level, without the problems associated with cross-species analyses. This studentship will compare strategies across an environmental gradient and use an experimental approach to test the key hypothesis that the probability of migrating is dependent on condition and frequency-dependent effects (eg social rank), but that the migration threshold varies between sites. The student will work on a relatively well-studied partial migrant (the Robin) that is easy to capture, observe and manipulate. We will work on populations at Banchory and in England. The study will involve (1) quantifying which individuals stay and go in each population, (2) comparing the fitness costs and benefits of alternate strategies, (3) manipulating putative mechanisms (eg food) within one population, (4) developing individual-based models of partial migration, using the field data for parameterisation and validation, and predicting changes in migration strategies under future climate scenarios, and (5) exploring ecological and evolutionary consequences of shifting migration patterns by developing existing models at Banchory.*

Away from the birds, dragonflies seem to be present in increased numbers. We see them on almost every visit. In the past we have only seen a handful of the creatures on any one day. On July 26<sup>th</sup>, however, we witnessed an assemblage of over 100 individuals, including both hawk and darter species, flying in the new glade along the main ride, filling the air from head to tree-top height. There were so many that the noise from their wings could be heard, sounding like the falling of light rain. We were, a week later, fortunate enough to be able to photograph a torpid dragonfly as it hung onto low vegetation in the rain. Another species record for the wood *Aeschna cyanea* and, at the same time, we had confirmation of the identity of a pair of ladybirds, *Calvia 14-guttata*.

Over the past years we have noted a new sedge growing in a wet patch in Bower's ride. Thinking it could be a rarity, we have taken care not to tread on it and now it is growing vigorously and seems to have spread to other similar wet patches in the wood. At last, it has produced some flowering heads and these have been identified as pendulous sedge, *Carex pendula*. It is new to the wood, although known in the general area. It is also sold as a garden plant. By chance, the whole patch was mown, as part of the normal ride cutting operations, the week after it was first seen flowering. John McM wonders if we have not seen it flowering before because mowing normally destroys the flowering stalks before they open. If this is the case, how is it spreading so successfully? Or is it? John has been talking to Norman Lewis who had spotted it himself on a recent visit. He thinks other sedges in the wood are more likely to be different species. Sedges form a notoriously difficult group to identify reliably: a project for next season unless someone can identify the different species even though they have been mown.

## Scaly leg mite

We have captured at least two Chaffinches recently which have been infested with the scaly leg mite, *Knemidocoptes mutans*. (Incidentally, this gives us yet another species record, unwelcome though it may be). This parasite lives under the scales of birds' legs. The apparent growth on the legs is excessive dead scale material resulting from the activities of the burrowing mites. In extreme cases, toes, or even whole feet may become so badly infested and encrusted that they drop off the bird. The mite can be transported from bird to bird via dead scales which have fallen from an infested leg. Clearly, places where birds gather to roost, or to feed (particularly on tables or on the ground, give the highest risk of transmitting the infestation between birds. Chaffinches seem to be more susceptible to the parasite than most other species and infestation rates are increasing in some parts of the country. At one site in the West Country, for example, most Chaffinches are badly infested. The BTO instructions for dealing with the mite were given in Ringers' Bulletin of Autumn 2000. If you catch a bird with both legs infested, release it unringed. If you catch a bird with only one leg infested, then it may be ringed on the other leg provided the bird is in otherwise-healthy condition. Whenever an infested bird is ringed, or recaptured, make a note on the field sheet. This will help determine the whether infested birds can become mite-free naturally.

Because one infestation route is via dropped scales, any bird bag which has held an infested bird must be taken out of use immediately the bird has been released and not used again until it has been washed.

## Treswell Wood IPM Group data in print

The latest issue of Ringing and Migration contains the paper '*Validity of ageing Wrens on fourth primary spots.*' Based on our long-term observations of Wrens, particularly those ringed as juveniles and retrapped later as adults, the conclusion is that Wrens with 10 spots or more can safely be aged as 4/6, those with 8 spots or fewer as 3/5. Thanks to Robin Ward for doing so much on this paper and to all of you who have noted Wren spots over the years. Some of the data may resurface in another forthcoming publication - Jeremy Greenwood contacted us with the following request.

*I liked the paper on Wren spots. Would it be possible to have the data for the birds that were captured as both adults and juveniles? It might be a nice example for paired comparisons in the statistics book that Julian and I are writing.*

Our data also appear in a recent *Oikos* (Vol 112, pages 91-101). In '*Recent changes in body weight and wing lengths among some British passerines*', Yoram Yom-Tov et al have examined changes in mean body mass and size of birds in two sites where long-term data sets are available - Wicken Fen and Treswell Wood. The object was to examine whether masses were decreasing in line with Bergmann's rule (*in warm-blooded animals, races from warm regions are lighter than races from cold regions*) and wing lengths increasing according to Allen's rule (*in warm-blooded animals the relative size of exposed portions of the body decreases with decrease in mean ambient temperature*). If these rules apply, then there should be changes with time in mean body mass and wing lengths as the climate warms. Some species had changed in line with these rules but, overall, the results gave rise to more questions than answers. Again, thanks to all who have helped create our long-term computerised data set.

You will, no doubt, recall John Clark's fine picture of our festive colour-ringed Robin attacking a mince pie (Twitter 55). This picture will also appear on a poster about the EURING data bank at this summer's International Ornithological Conference.

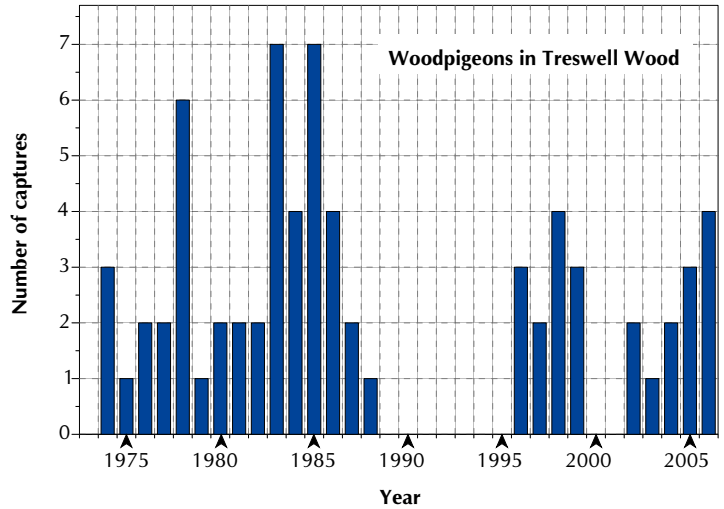
## Brood patch temperature

Until the beginning of this season, there were published records of brood patch temperatures for only four species of passerine worldwide. Charles Deeming thought this parlous state of affairs should be remedied and asked us if we would be able to try measuring temperatures using a non-intrusive infra-red ear thermometer. This has proved very easy. We have taken measurements for 17 species and the results will appear as a poster at the forthcoming Incubation and Fertility Research Group meeting in Lincoln in September. The aim of this year's operation was to test whether the system worked. We think it does and that temperatures of the brood patches on mist-netted birds are no different from those when they are sitting on eggs. Many questions have been raised - how does the brood patch temperature change during the nesting process? What is the relationship between brood patch temperature and egg temperature? After this year's work we are in a position to start addressing these unknowns.

## Noteworthy Captures

Species	Age/sex Grid	RingDate
Woodpigeon	6 04/06/2006	FV89989 Q02 Feeder

Woodpigeons are increasing in abundance in gardens - they have now reached position 10 in BTO Garden BirdWatch. They seem to be increasingly abundant in the wood too (although they have not been included in the CBC work). Altogether in this interval we have trapped 4 Woodpigeons. Our grand total is just 70 adult captures - an average of around only 2 per year.

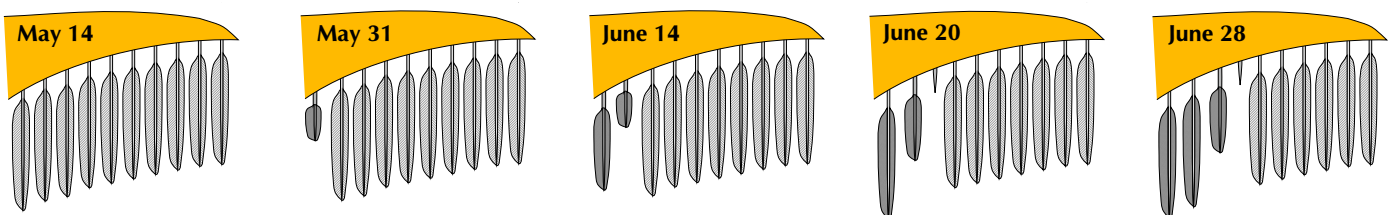
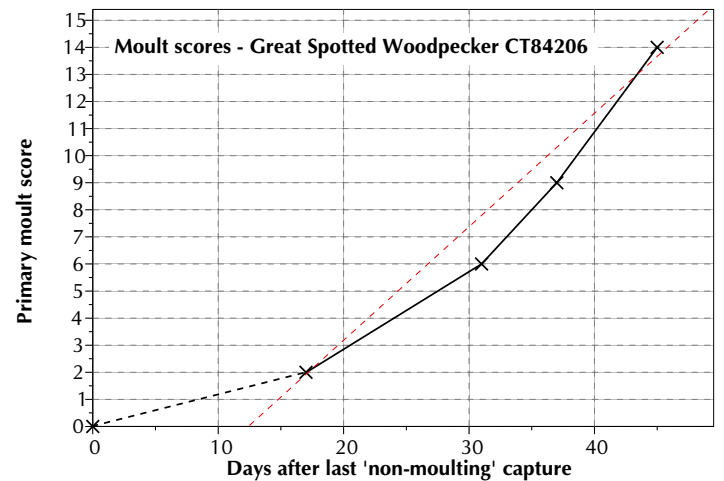


Great Spotted Woodpecker	3 19/07/2006	CT84723 Q02 Feeder
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Although adults of the species have been present, and we have seen the occasional juvenile, this is the first we have trapped this season. It seems likely that they have suffered a poor breeding season - possibly because of the same predation as our nestbox birds have been suffering. The lack of juveniles and consequent lower food demands on the adult woodpeckers might help explain this year's relative success of Willow and Marsh Tit nests.

Great Spotted Woodpecker	5M 28/06/2006	CT84206 Q02 Feeder
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Examination of capture histories show some birds are very frequently trapped at the feeders. Sometimes frequent recaptures can give very detailed information. This is the bird's fourth capture since its annual moult began so we have four sequential records of its primary moult. The diagram illustrates the progress of moult in this bird and the graph shows its total moult scores together with the typical moult for the species as given in the BTO Moulting Guide. Incidentally, giving the full 10 character description of primary moult is far more useful than just a primary moult score. Since you have to work out the score on each feather in order to find the total score, it is simpler just to record these ten scores. (On this occasion there is no need to worry about the data processor's work load - IPMR will total the individual scores automatically.)



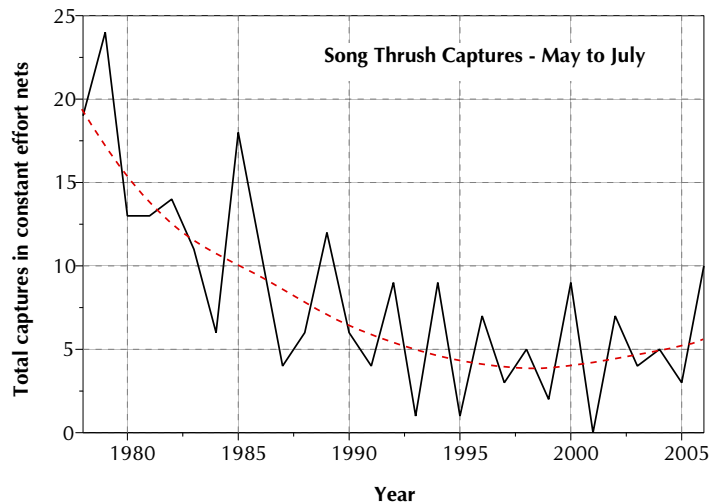
Dunnock	4M	N275299	25/06/2006	D02
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Our oldest recent small bird. We ringed this one in an earlier century - September 1999 - and retrapped it once in

1999 and once in 2000. Since then, until this year, no sign of it. Perhaps its excuse is that it was trapped deep in block H where we rarely set mist nets. Its early captures were all in its first autumn and winter when it could have been wandering around in search of a permanent territory.

**Song Thrush**                      **4M**                      **RS78235**  
    **04/06/2006**                      **K02**

Not an exceptionally old individual - we ringed him nearly three years ago as a first breeding season male. Of interest, however, is the number of Song Thrushes we are capturing. On this day alone, we trapped three adults and two juveniles of the species. It is not wise to predict long-term trends from a single year's captures, but the number of Song Thrush captures in constant-effort nets during this interval is the highest since the decline in the 1980s. The moving average curve for the data also shows a gentle increase over the last 5 years (dashed curve on the graph which has been drawn by eye from calculated 5-point moving averages.)



**Mistle Thrush**                      **4F**                      **CT84258**                      **07/06/2006**                      **Q02 Feeder**

This species is often seen in the car park area; this bird was captured at the feeder, although whether it was just passing or using the feeder we do not know. (See Twitter 53 for details of the increase in recorded Mistle Thrush CBC territories.)

**Spotted Flycatcher**                      **4F**                      **T663339**                      **07/06/2006**                      **Q02 Feeder**

Like the Mistle Thrush, it is most unlikely that this bird was at the feeder for peanuts. More likely it lives in the car park area which forms an open glade (although, obviously not one with a particularly grassy floor). This was our first capture of the species this year. They seem to be just maintaining a tenuous foothold in the area. It was followed by 4 more captures of the species including R353382, below.

**Spotted Flycatcher**                      **4F**                      **R353382**                      **19/07/2006**                      **K03 Pond**

Spotted Flycatchers, with their large eyes and very low wing loading can see mist nets better than most birds and can often avoid flying into them by taking rapid evasive action. Catching these birds is rare enough, retrapping them is exceptional - particularly when their numbers are so low. This is only our 5<sup>th</sup> retrapped adult and, of these, only 3 have been trapped in two different years. The record holder is KP25796 ringed in May 1978 and retrapped in June 1981. Today's bird was ringed in May 2004 in company with a male, both birds in breeding condition. At 2 years and 50 days since being ringed, it has our second longest recapture history for the species.

**Blackcap**                      **4M**                      **R502719**                      **11/06/2006**                      **H04**

Until this capture, we had only retrapped one Blackcap this year which had been ringed in an earlier year. Normally we expect the first birds to arrive to be those who know the wood well - not so this year. It was ringed as a recently-fledged juvenile in July 2003. It was retrapped here in 2004 but not in 2005. Curiously, later in the day, we retrapped two more of the species which had been ringed (both as adults) in the wood, also in 2003. One (R502702) had not been recaptured since 2003, the other (R353315) had appeared in 2004 but not 2005.

**Blackcap**                      **5F**                      **R353153**                      **25/06/2006**                      **E01**

Oddities surround the females too. This bird was ringed as a juvenile in September 2005 and has returned to us. It is far less common for juveniles to return to the wood than for adults. We later trapped R353561 which had also been ringed as a juvenile in 2004 and not retrapped until now.

**Willow Warbler**                      **3J**                      **AXL481**                      **26/07/2006**                      **K03 Pond**

Sadly, our few Willow Warbler captures in recent years seem to be almost exclusively restricted to juveniles. Few, if any, now breed in the wood. With generally declining numbers in the region there are habitats better suited to them than the young coppiced areas that Treswell Wood contains. This was our first of the species for the year, caught when coming to drink or bathe at the pond. It was followed, the next week, by the surprising capture of an adult at a late stage of its annual moult.

**Goldcrest**                      **3J**                      **AXL467**                      **23/07/2006**                      **B03**

Although the wood holds good numbers of Goldcrests in winter, we rarely catch juveniles in the summer. The last time we trapped one was in August 2002. This bird was in an early stage of post-juvenile moult and sported only

the first two visible yellow-tipped adult crown feathers.

**Coal Tit                      3F            R502827      31/05/2006      N06 On nest**

We normally enjoy one very early Coal Tit nest, often at the east end of Horse Guards' Parade (L07). This was the bird that made this year's early nest - about 2 weeks earlier than the next tit nest in any box. Alas, the nest was predated. Because of her early start and the early, untimely end to that attempt, she had time to nest again. This time the nest was successful - and we have since retrapped one of her rather late-fledging offspring.

**Marsh Tit                      3J            R558824      14/06/2006      Q2 Feeder**

Our first nestbox-ringed bird of the year to be retrapped. Not a vast distance from its natal box - a mere 20 metres - but it has been captured subsequently in the south of the wood. It is a significant recapture. Last year all our Marsh Tit nests failed; this year two have succeeded and here is evidence of success beyond fledging. This bird now wears the colour combination Left: pink over red; Right: red over BTO ring.

**Willow Tit                      3J            T663342      11/06/2006      G04**

After last year's disastrous breeding failure in the wood it is good to see some success. The two nests found by the RSPB team both resulted in fledged young. It is quite likely that this bird - our first juvenile Willow Tit of the year - is a home-grown product. We have now captured a total of six of this year's juveniles.

**Great Tit                      6F            R353719      20/06/2006      Q02 Feeder**

We have mentioned the Grey Tit before now (Twitter 37). Ulli, from her experience with laboratory populations of the species suggested that the grey plumage was a result of a dietary deficiency at the time of feather growth rather than being an inherited character. This bird provides some evidence for this. She was ringed in February 2005 and her plumage noted as being of the Grey Tit type. On recapture, twice, the same note was made on the field sheet. She was recaptured several times after the annual moult in autumn 2005 and no note was made of her plumage. Today, we looked up her history while she was still in the hand and when we realised she had been a Grey Tit, we noted specifically that her plumage was as bright as normal for a Great Tit. No trace of the grey plumage at all.

**Great Tit                      3J            TC61411      20/06/2006      Q02 feeder**

It is always an exciting moment when the first nestbox-ringed bird of the species appears in the mist net. This was the one. Since then we have retrapped 25 of the 102 birds fledged from boxes - this is a very high recapture rate. Most Great Tits have been retrapped at the feeder which is in curious contrast to the Blue Tits. Few have been retrapped at the feeder; indeed few were trapped anywhere at all until the captures of late July. The table shows an interesting contrast between the use of different resources within the wood for the two species. Note also the very large number of Great Tits captured. This reflects the proportions of the two species in nestboxes fairly well, but also indicates that many Great Tits have been nesting in natural sites, or else have nested nearby and their young have rapidly moved into the wood.

**Mist-net captures of juvenile birds, May to July 2006**

Species	Captures at Feeder	Captures at Pond	Other captures
Blue Tit	15	11	27
Great Tit	126	15	9
All other <i>Parus</i> tits	21	7	8
All other species	58	121	29

**Nuthatch                      3J            BA36694      25/06/2006      D01**

We continue to be blessed with a steady trickle of this attractive species. All our recent captures have been of juveniles. So far we have ringed a total of 5 this season. None, of course, have chosen to nest in the boxes provided especially for them.

**Tree Sparrow                      4M            T663349      14/06/2006      Q02 Feeder**

An unexpected capture - the first Tree Sparrow to be captured in the wood since 1984. In that year we ringed 6 adults in January and February and the CBC team recorded three territories. The last pairs found breeding in nestboxes the wood were in 1983. That was the end of our population which, at its peak, produced 60 nests in a year from about 30 pairs. Is this the first of a new colonisation? We can only hope so.

**Chaffinch                      6F            N275030      14/06/2006      Q02 feeder**

Some Chaffinches seem to avoid us for two or three years, then reappear. This bird was last seen by us in 2003 having first been ringed in May 1999 as a first breeding season female. That makes her 8 years old and this capture

was 7 years and 31 days since she was ringed. She has our seventeenth longest time between ringing and most recent recapture for any bird, and is 6<sup>th</sup> in the Chaffinch league. She still has some time to last before breaking the national record of over 11 years or the European record of 14 years.

## Controls and recoveries

### Tawny Owl                      8F                      GF42548                      06/05/2006                      E00 On nest

This is our first ever incoming control of a Tawny Owl. It was ringed, as a nestling, by Adrian Blackburn near Eaton in May 1996. It is rather an odd recapture. Tawny Owls are very sedentary, relying on intimate knowledge of their patch for hunting success. John Black has trapped the Tawny Owls on their nests systematically for the last three years and this bird has not been in our boxes. Where has she been operating in the missing 9 seasons between ringing and this event? Although this interval of 9 years and 355 days represents our longest time between ringing and recapture of any of our birds, the owl is still a mere youth compared to the national record for the species of 21 years and 5 months.

### Great Tit                      4F                      VS50833                      24/05/2006                      M08 Dead in nestbox

Another sitting bird falling victim to a weasel. This was a first for any of the nestbox team - the weasel was in the box when it was inspected. Quite a surprise for weasel and John Clark. Both escaped unharmed, unlike the Great Tit. A sad loss - this bird had celebrated the second anniversary of her ringing only the previous day, having been ringed as a nestling in the south of the wood in 2004.

## 10 Week Summary 2006 Interval 3 in Standard Sites

Visits 1784 1790 1774 1776 1778 1780 1786

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Woodpigeon	1	.	.	.	.	.	1
Great Spotted Woodpecker	.	.	.	1	.	.	1
Wren	3	5	3	3	1	.	15
Dunnock	2	2	5	7	1	.	17
Robin	.	2	12	2	2	1	19
Blackbird	4	4	4	7	4	1	24
Song Thrush	2	2	2	3	1	.	10
Blackcap	5	13	1	3	1	.	23
Chiffchaff	1	.	.	.	.	.	1
Goldcrest	.	.	1	.	.	.	1
Spotted Flycatcher	2	.	.	.	.	.	2
Long-tailed Tit	.	.	9	1	.	.	10
Marsh Tit	.	.	2	1	.	.	3
Willow Tit	.	.	1	.	.	.	1
Coal Tit	.	.	2	.	.	.	2
Blue Tit	.	.	8	.	.	1	9
Great Tit	.	2	1	1	2	6	12
Nuthatch	.	.	2	.	.	.	2
Treecreeper	.	.	9	5	.	2	16
Chaffinch	.	1	1	4	.	.	6
Bullfinch	1	3	.	2	4	.	10
<b>Totals</b>	<b>21</b>	<b>34</b>	<b>63</b>	<b>40</b>	<b>16</b>	<b>11</b>	<b>185</b>

## Treswell Wood Standard Site Totals in 10-week Periods

Interval	1	2	3	4	5	Total
<b>Averages</b>						
<b>1978 - 1987</b>	90	113	182	140	130	655
<b>1988 - 1997</b>	86	107	170	149	127	637
<b>1998 - 2005</b>	89	99	127	126	128	568
<b>2006</b>	128	98	<b>185</b>	---	---	---
<b>Maximum</b>	128	145	288	253	177	865
<b>Minimum</b>	57	33	94	68	59	364
<b>Mean</b>	90	106	164	139	127	624