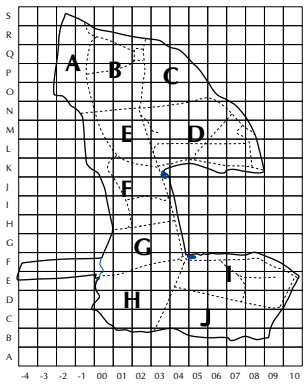

TWITTER

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

December 2010 Treswell Wood IPM Group

(Integrated Population Monitoring)

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CBC Pat Quinn-Catling

Nest Records Chris du Feu

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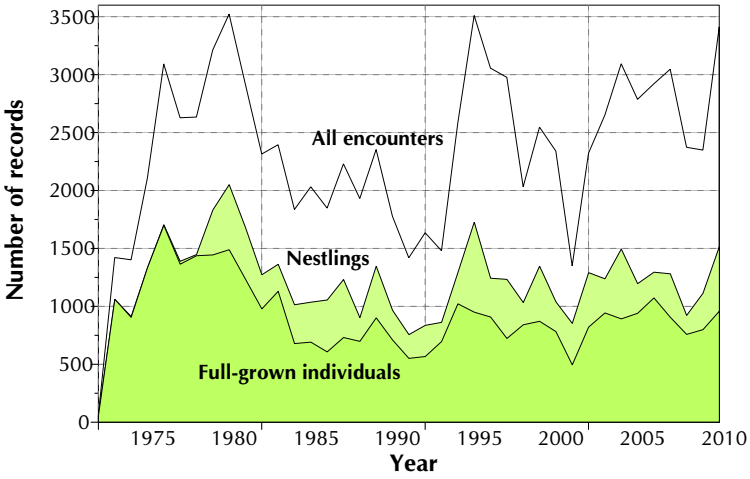
2010/5

Number 80

Another year passed and another set of census, nest record and ringing data added to the ever growing archive. The year ended with rather fewer visits than usual because of the cold and difficult conditions for birds and humans alike. We just managed to carry out the required quota of standard-site visits - thanks to the stalwarts who emerged on Boxing Day to ensure this operation was completed. Our data set now runs back 38 full years; most of the information is computerised. Thanks to all who have helped contribute to this unique data set.

In each December issue of Twitter we have produced a table of bird encounters for the year. We have never produced any table giving past annual totals for comparison. It is not easy to make valid comparisons. Our ringing operation has changed over the years with constant-effort ringing being introduced in 1978 and nestboxes in 1979. A feeding station was installed in the early 1980s. In the second half of the 1990s, as part of the Nottingham University work, we made many additional sight records of Great Tits. A table of total numbers of birds ringed would omit birds which we retrapped in that year but had ringed in a previous year. Totals of all captures and sightings would give greater weight to the multiple captures of individuals (such as some regulars at the feeder or birds frequently sighted on known territories). Is there a best way of using annual totals to demonstrate something about the populations in the wood? The total numbers of individuals encountered within one year is better than total numbers ringed or total number of encounters. Even here we have a problem of nestling-ringed birds. They will increase the total number of birds encountered and reduce the number of birds first encountered as fledged birds. The graph produced here uses this, possibly best, solution with the total number of birds encountered in each year, broken down by status (nestling or fledged) at their first encounter during the year.

Ringing encounters in Treswell Wood - 1972 to 2010



Great Spotted Woodpecker biometrics

The December 2010 issue of Ringing and Migration has a paper by Ken Smith entitled Continental Great Spotted Woodpeckers in Britain. It is well known that the continental race, *Dendrocopos major major*, has, on average, longer wings than the native race *D. m. anglicus.* However there is considerable overlap between wing lengths. Recent work has shown this overlap to be far greater than previously thought. Trying to identify the race of individuals based on wing length alone will lead to many large native birds being classified as continentals and smaller continentals being classified as native. Undoubtedly some continental birds reach Britain, particularly on the east coast. Ken cites a 1907 paper which claims a difference in bill shape is a critical separation feature for the different races. The BTO ringing database does contain a few records of Great Spotted Woodpecker bill lengths and depths - 87 and 22 respectively. The value of this sample is reduced because three different bill depth measurements can be made and also some birds may have had one measurement made but not the other. In order to investigate the difference between the races, Ken asks ringers to record bill length and depth measurements on this species. The measurements he recommends are the 'bill to skull' and 'bill depth at distal edge of the nostril' (as described in the Ringers' Manual). It seems most unlikely that we have ringed any continental birds in the wood but the value of our data will be that we have recapture histories for most individuals that go back to their natal year when we ringed them as juveniles. That ensures that we know they are definitely of the British race.

Is it worth doing for the small number of individuals we trap? Yes, definitely. With the submission of computerised biometric data, if ringers submitted data for all birds trapped, there would be 2,000 records available within a year.

On the other hand, if every ringer considered that their paltry sample of one or two records a year was not worth bothering with then there would be no records at all. The value of combined small contributions can be very great indeed. Treswell already has a good track record with the species - our efforts have resulted in much-revised guidance on ageing the species and we hope to understand more about sexing juveniles before long. Let's make even more of our well-documented population of this species.

Annual Summary - All ringing records 2010

	Ctrl.	New Birds			Retraps		Sight	Recvs.	Othr	Total
		Adult	Juvnl	Pulli	Rt	SDR				
Sparrowhawk	.	3	.	.	.	.	.	.	.	3
Woodcock	.	1	.	.	.	.	.	.	.	1
Stock Dove	.	.	.	11	.	.	.	.	.	11
Woodpigeon	.	1	.	.	.	.	.	.	.	1
Tawny Owl	.	1	.	1	4	.	.	.	1	7
Green Woodpecker	.	.	.	2	.	.	.	.	.	2
Gt. Spotted Woodpeck	.	3	6	.	13	3	.	2	.	27
Wren	.	26	69	6	47	11	.	.	.	159
Dunnock	.	13	22	.	22	4	.	.	.	61
Robin	.	30	46	.	58	34	1	.	.	169
Blackbird	.	38	28	7	60	10	.	1	.	144
Song Thrush	.	18	4	.	3	.	.	.	.	25
Redwing	.	1	2	.	.	.	.	.	.	3
Whitethroat	.	1	.	.	.	.	.	.	.	1
Blackcap	1	46	18	.	24	17	.	.	.	106
Chiffchaff	1	25	27	.	9	6	.	.	.	68
Willow Warbler	.	.	2	.	.	.	.	.	.	2
Goldcrest	.	14	42	.	9	6	.	.	.	71
Spotted Flycatcher	.	1	.	.	.	.	.	.	.	1
Long-tailed Tit	1	42	1	.	67	7	.	.	.	118
Marsh Tit	.	.	7	23	71	5	.	.	.	106
Coal Tit	.	2	34	.	97	5	.	.	.	138
Blue Tit	5	46	79	161	215	9	.	.	7	522
Great Tit	5	46	39	333	813	110	.	2	5	1353
Nuthatch	.	3	4	.	22	.	.	.	.	29
Treecreeper	.	8	12	.	42	6	.	.	.	68
Jay	.	2	1	.	2	.	.	1	.	6
Chaffinch	.	46	38	.	58	3	.	.	.	145
Goldfinch	1	6	1	.	4	1	.	.	.	13
Bullfinch	.	14	17	.	15	6	.	.	.	52
Totals	**14**	**437**	**499**	**544**	**1655**	**243**	**1**	**6**	**13**	**3412**

Key:

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

Frass traps

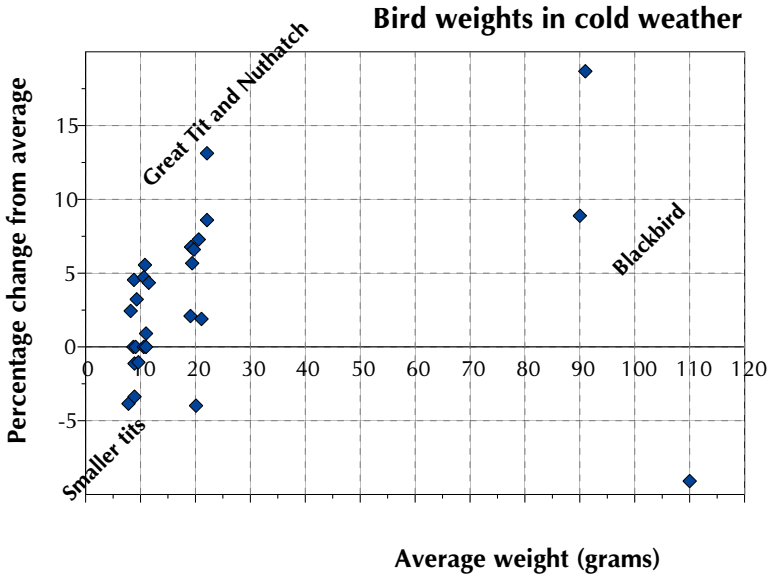
You may not be familiar with the term 'frass' - we were not until recently - but it is a one-syllable term, repeatable in polite company, to describe caterpillar droppings. And why bother to trap them? We know that tit nestling growth success is dependent on the caterpillar crop. We have often wondered about how to measure the caterpillar abundance to be able to relate this to our nestbox productivity. The caterpillars taken by the tits to feed the young are very small, massively abundant and live high in the trees where they are well camouflaged on the green leaves. This makes it quite a challenge to measure the abundance directly. An alternative approach is to collect, in a standardised way, the caterpillar droppings. Work in the Netherlands has shown this to be a good index of caterpillar abundance. The method was described at the December BTO conference and interesting results described. Ken Smith, of woodpecker fame and incoming chairman of the Ringing Committee, has devised a DIY frass-collection kit which functions just as well as the much more expensive Netherlands prototypes and we will be attempting to use them during the forthcoming breeding season.

Obviously we aspire to gathering a long-term data set. However, even one year's data will be of interest. We can

look at the peak time of caterpillar abundance and compare that with the timing of tit nestling development; we can compare the abundances and timing in areas of predominantly ash and those areas with more oak. We might even be able to throw light on why the north-western corner of the wood normally has nests a few days earlier than other parts of the wood.

Cold weather ringing

When severe weather strikes, ringers are asked to consider carefully their ringing operations - bird welfare is always a prime consideration. We did cancel mist-netting visits from late November until mid-December - conditions were very bad for both man and beast. By mid-December we felt able to attempt a short visit with under two hours netting in the middle of the day, checking nets every 10-15 minutes rather than every 20-30. To our relief, the birds we caught appeared in good condition with weights not only well above starvation level but also mostly above average for the individuals. The graph shows the weights of individuals caught on that day expressed as a percentage difference from their average weight on all their previous captures. Even those with relatively lowest weight were far above starvation levels. Of course, there will have been high mortality during the severe weather but the birds that have survived seem to be in good condition. Contrary to what might be expected, birds try to increase their weight during cold weather. This is to give them fuel to burn during the long winter nights - a Blue Tit may burn 1 gram of fat overnight - about 10% of the normal body weight. Normally it is advantageous to carry as little weight as possible - a heavy bird is less likely to escape from predators. In cold weather the risk of of overnight starvation becomes relatively greater so fat load, and consequently weight, must be increased at the expense of greater risk from predators.



Big bills

In addition to the usual data collected for each bird we catch, we make notes about any particular different features. Who knows when it will come in useful? One such occasion arose recently. The BTO Garden BirdWatch magazine, Bird Table, contained a picture from one of the observers, of a tit with an overlong bill. A note was included asking for other readers to offer additional information. With computerised data it was not problem to hunt for information in our records. The current issue of Bird Table has a longer article summarising readers' contributions. Most observations are of individuals with malformed bills. Our offering is a little different. We have not only a record of how many birds have had deformed bills but, also, of the number which have normal bills - that gives a measure of frequency of this condition. We also have records of birds with normal bills being retrapped later with a deformed (usually elongated) bill - that gives a measure of how rapidly the condition can develop. And we have records of recaptures of birds which had been captured with overlong bills, which we clipped to normal length and which we subsequently retrapped still with normal bills - that may say something about the cause of the condition - it seems more likely to be something mechanical rather than a disease or an inherited condition. Well done all recorders - keep up the good work.

Noteworthy Captures

Species	Age/sex	Ring	Date	Grid
Sparrowhawk	**5M**	**DA51862**	**19/12/2010**	**N-1**

Our third Sparrowhawk for the year. Like most of our Sparrowhawks it is a male. Unlike many, though, it was not a first-year male on this encounter, its first with us in the wood.

Great Tit	4M	T663439	23/11/2010	P-2 Roosting

We made two evening visits to nestboxes during October and November - the cold weather put off the planned December event. This was the 25th capture of this bird, ringed as a juvenile in July 2006. It seems to be much more sedentary than most Great Tits, all its captures, including those as a juvenile, have been in the north-west corner of the wood, blocks A and B only. It is frequently found roosting - this being the fifth time we have recorded it, always in one of the boxes on the west edge of the wood.

Nuthatch 3M TR47547 31/10/2010 G04
It has been another good autumn for his species. They are almost invariably heard at some time during our mist-netting visits. The year's total of 29 encounters with the species is as high as the record number in 2008 which was followed by a sharp dip in 2009.

Jay 3 DA51860 24/10/2010 K00
To catch one Jay is unusual; to catch two in one day is exceptional. It last happened in October 1994. Prior to that we had a spate of more-than-one-in-a-day events during 1983-1984 after an irruption of continental birds. The two today were both new, this one a first year bird, the other an adult. They were, conveniently, caught at the same time (but in different nets). This gave an excellent opportunity for examining differences in plumage between these birds of two different ages.

Goldfinch 3J X649903 21/11/2010 F04
This has been a good year for Goldfinches - 13 captures in total, nearly double our previous highest annual total. This particular individual was still in post-juvenile moult when we trapped it in late November. Bullfinches and Goldfinches do seem to moult very late into the year, but to have a bird still with most of its head in juvenile plumage so late in the year is exceptional.

Controls and Recoveries

Tawny Owl 2 GF73599 07/11/2010 Woodbeck Bottom, Road casualty
This owl was ringed in the wood as a nestling in 2002 and not seen since. In the May 2002 issue of Twitter we noted the nest in which this owl was reared. Its exceptionally well organised parents had built a considerable larder for this chick and its siblings. There were bodies of a dozen rodents ready for eating, all neatly stacked with heads to the wall. Voles were on the left of the box and wood mice on the right with a headless dormouse in the middle. Obviously a good start in life for this 8 year old bird.

10 Week Summary 2010 Interval 5, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	**5**	**3**	**Adult**	**5**	**3**	
Sparrowhawk	.	1	.	.	.	.	1
Wren	1	.	8	2	.	5	16
Dunnock	.	.	1	1	.	1	3
Robin	1	.	3	.	.	3	7
Blackbird	3	.	10	12	.	1	26
Redwing	1	.	2	.	.	.	3
Chiffchaff	1	.	.	.	.	.	1
Goldcrest	3	.	13	.	.	.	16
Long-tailed Tit	5	.	.	12	.	.	17
Marsh Tit	.	.	.	2	.	.	2
Coal Tit	.	.	.	2	.	4	6
Blue Tit	.	.	4	3	.	5	12
Great Tit	.	.	.	11	.	7	18
Nuthatch	1	.	1	.	.	.	2
Treecreeper	2	.	.	2	.	1	5
Jay	.	.	1	.	.	.	1
Chaffinch	.	.	.	1	.	.	1
Bullfinch	.	.	4	.	.	2	6
Totals	**18**	**1**	**47**	**48**	**.**	**29**	**143**

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

Recent years:

Year	**1**	**2**	**3**	**4**	**5**	**Total**
2008	125	130	151	86	100	592
2009	57	130	156	85	80	508
2010	94	100	144	119	**143**	**600**
Summary Data since standard site netting began in 1978:						
Maximum	128	145	288	253	177	864
Minimum	57	33	94	68	59	364
Mean	90	108	162	133	125	619