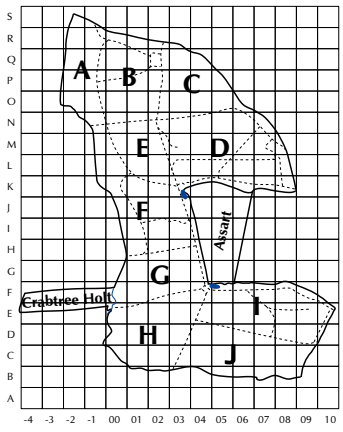

TWITTER

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

May 2023 Treswell Wood IPM Group

(Integrated Population Monitoring)

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Nest Records Chris du Feu

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www.treswellwoodipmg.org

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2023/2

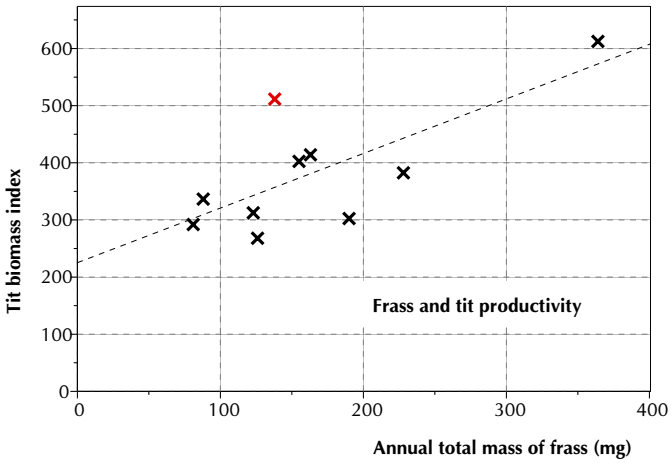
Number 142

After several relatively dry weeks, wetter weather left the wood very wet indeed. Nightingale Ride was deeper in mud than we had seen for a long time (or, in the case of newer ringers, ever before). The 'Everglades', an area a little north of the Assart gate, was full with water flowing across the main ride requiring wellington boots for the nestbox round. The earlier springlike weather seemed to have encouraged some tits to nest early with others delaying nesting when the colder weather returned. This is making for a protracted tit nesting season. We do not yet have all the first egg dates for tits but the earliest we do have (for Blue, Great and Coal Tits) are about average for our 45 years of nest records in the wood. However, given that nesting now is, typically, nearly two weeks earlier than it was when we began, an 'average' overall date seems rather later then we would expect. We will know when we have recorded and assembled all the data.

The standard site captures for this second 10 week interval of the year are also about average. This number should be treated with the same cautionary note as we see over financial investments 'past performance is no guarantee for future performance'. The average tells us that the combination of last year's breeding season and the winter's survival have, between them, been typical. What we will see later in the year will depend on the success of the breeding season. In these days of exceptional environmental change it would be foolish to predict.

Frass

Apologies to Ken Smith who analyses our frass (i.e. caterpillar droppings) collection each year as part of his studies of the relationship between caterpillar abundance and tit breeding. Ken sent us the results for the 2022 breeding season some time ago but they found their way deep into a pending tray. Initially Ken's project was to look at the timing of the caterpillar crop in relation to the timing of tit nesting. Results of that study have been published and show that, at present, tits have just enough behavioural plasticity to cope with the changing timing of the oak leafing and consequent caterpillar crop. We now have moved on to looking at the fledging success in relation to caterpillar abundance, irrespective of the timing of the season.



The mass of frass is used as a proxy measure of caterpillar abundance and the proxy measure of tit fledging success is the number of Blue Tits fledged plus 1.5 times the number of Great Tits (this allows for Great Tits requiring more food than Blue Tits). We call this term the Biomass Index.

For 2022 (red symbol) the pattern is the same - the tit fledging is strongly related to the caterpillar crop. The frass collecting trays, sited in matched pairs under oak and ash, also show that the Ash crop is negligible compared with that on Oak. When the Trust bought the wood, most of the Oak had been removed leaving Ash as 90% of the remaining mature trees. We might wonder what the tit breeding population was before the Trust purchased the wood when Oak had been so much more abundant and what will happen when Ash Dieback has taken its toll.

Recording post-juvenile moult

After the BTO ran the post-juvenile moult project a few years ago, we have been recording the extent of post-juvenile moult of the alula and greater coverts on more birds. The BTO project was a feasibility study aimed, eventually, at examining any relationship between survival and the extent of the post juvenile moult. The jury is still out on that. However, the project showed that there were some inconsistencies in recording. Someone might

record, say two old greater coverts and on a subsequent occasion another ringer might record three. We should note that this is not likely to be a lack of counting ability on the part of ringers. The problem is that it is sometimes very difficult to judge whether a feather is as bright or duller than an adjacent one. Indeed, sometimes changing the angle of viewing can make dull feathers bright or vice versa. For some species a judgement is required on the pattern of markings on the feathers. Again it can be hard to judge whether a patch is smaller and diffuse or larger and clear cut - many fall between these extremes. Some species are more difficult than others and, within species, some individuals more difficult than others.

There are several reasons to record these features. All add to our own and the national data set which can be used to understand bird biology in a rapidly changing environment. Recording these features shows one criterion the ringer had used to age the bird giving additional confidence to the record. It also helps the trainee ringer (i.e. all of us) to understand the moult process which is so important for accurate ageing of birds in the hand. Definitely it is worth recording these features when we can.

However, in the long run it is only worth recording if our results are accurate. With our high retrap rate we are able to examine our own record of consistency. In an appendix to this issue we have included a table of discrepancies for all OGC and Alula scores we have recorded on birds we have encountered at least twice. The tables are included to help show us where the problems lie, which species and which scores may be too unreliable to be worth attempting and to encourage improvement where possible.

Noteworthy Encounters

Species	Age/sex	Ring	Date	Grid

Stock Dove 4 EF27897 14/05/2023 Q03

This is only the second Stock Dove we have ever caught in a mist net. (The first was one was a nesting adult in 2015 caught on a lower-than-usual flight path from its nestbox.) This bird was caught at a feeding station. We suspect that it, like others seen there later, was feeding on seed knocked out of a feeder by marauding grey squirrels. Disappointingly it was not a retrap.

Larger birds normally have a higher recovery rate than small passerines. However, of our 238 nestling-ringed Stock Doves we have subsequently found only five - two dead soon after fledgeling, one dead in a nestbox two years after ringing, one shot elsewhere and the mist-netted bird noted above. Of the 31 adults ringed on the nest, half have been retrapped on a later nest, with the maximum number of nestbox captures of one individual being eight.

The out-of wood recovery rate of 0.4% compares with the Woodpigeon rate of 4.8% The difference probably results from Stock Doves being a protected species and Woodpigeons not. No doubt some Stock Doves are shot (presumably mistaken for Woodpigeons) during crop protection. The fact that they are not a legal prey species will discourage shooters from reporting the ring.

Great Spotted Woodpecker 4M LK39016 07/05/2023 E06

Great Spotted Woodpeckers have more than just some bright red colour in common with London buses. You wait a long time and then several appear in quick succession. We caught one in mid-January and have caught no more since until one appeared early in May. It was followed half an hour later by this one. The first bird was a new male, this one, also a male, was ringed in February 2019 in its first winter.

Marsh Tit 5M AEZ3107 09/04/2023 N00

This tit was PIT tagged on 16/10/2022. It has amassed six recaptures and 21 registrations at a PIT tag reader but never on the same day that we were mist netting there. This led us to ask if there is any measure of trap avoidance by mist-net experienced birds where the net is frequently set at the same place. Mist netting, of course, relies on birds not seeing the nets and not avoiding them deliberately. Some of our Marsh Tits, and other tits too, are frequently recaught at the feeding station. However only one bird, out of the 23 PIT tagged, has been recorded at the tag reader on the same day as any mist nets were set there. Even then that bird, a Blue Tit, was not recorded at the tag reader until two hours after the ringing had finished for the morning.

This might appear to suggest that PIT tagged birds avoid the feeder when mist nets are set. If so, then why do other ringed birds not also avoid them? PIT tags are bigger than ordinary metal rings but no bigger than the colour rings we have put on birds in the past and they did not seem to deter birds from the feeders.

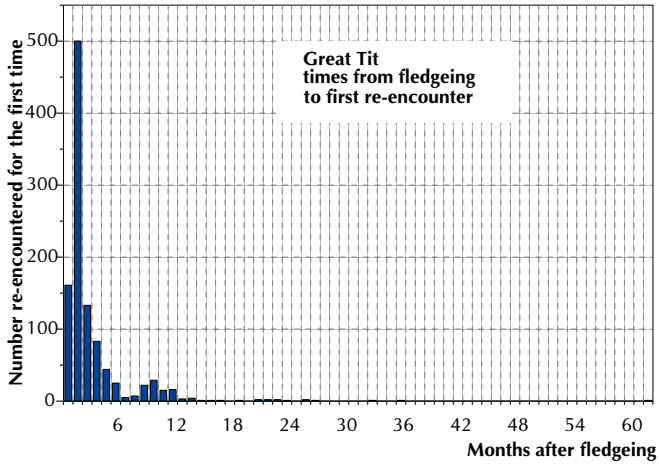
Blue Tit 4 AJN3943 27/03/2023 I03 Dead in nestbox

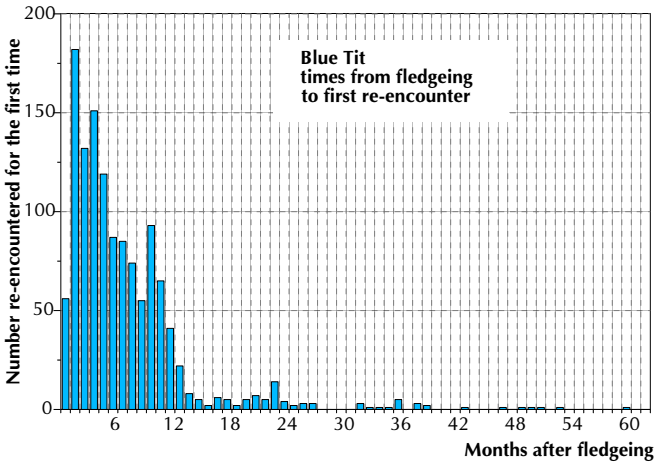
A bird ringed as a juvenile in 2022 and, like 60% of fledged juveniles, did not live to see its first breeding season. We had retrapped it twice and on both occasions it appeared healthy. It was found dead in a nestbox having died, presumably, whilst roosting overnight. There was no obvious cause of death. Perhaps the night was colder than expected and it had inadequate fat reserves to last the night.

Great Tit 5F PL95154 16/04/2023 O06

A first recapture for this Great Tit of the 2022 nestling-ringed cohort. We usually catch good numbers of newly fledged Great Tits whereas fledgeling Blue Tits, even though there are usually more of them, are generally caught in smaller numbers during the late summer. Thereafter we see a trickle of first-time recaptured Blue Tits but Great Tit first-time recaptures are reduced to a very slow, unpredictable drip.

The graphs illustrate the difference between the two species giving the times to first capture from the day of ringing for all years from 1979 when we began the nestbox operation. From the 2022 cohort we now have re-encountered 41/285 (14%) Blue Tits and 38/151 (25%) Great Tits. These compare with the overall re-encounter rates of 18% and 25% respectively for all years combined. The numbers for the 2022 cohort are likely to increase as can be inferred from the graphs, probably moreso for Blue Tits than for Great Tits.





Chiffchaff 4 DRA289 19/03/2023 R-1

The first of the year making 2023 the 8th earliest year for the species. Unusually we have had no recaptures yet from previous years.

Blackcap 4M ANA7808 16/04/2023 N06

This was our second Blackcap of the year being denied first place by about half an hour by a newcomer to the wood. It is around the average first capture date for the species. We ringed this one as a juvenile in 2019 and did not see it in the next two seasons. We suspect that covid-related disruptions to our routines will have played a part. In 2022 we caught it in the same run of nets as this capture, a year later. Juvenile mortality is very high for small birds, particularly for migrant species. Those that do survive then may disperse away from their natal area. It is rare to retrap a Blackcap ringed in its juvenile plumage in a subsequent breeding season. Of the 764 juveniles we have ringed, 92 have been recaptured but only 27 of these after their first winter. Once Blackcaps have reached adulthood, they are very site-faithful. Thus of these 27 adult-returnees, six have been retrapped in their third breeding season. Generally they are retrapped within a few metres of last year's capture location but in different parts of the wood from where they were ringed as juveniles. This bird was ringed as a juvenile in the far north-west of the wood, but it returns to be caught at the other side of the wood.

Goldcrest 4M DRA296 16/04/2023 O06

This is a very late capture for this species which occurs in the wood, mostly, as a winter visitor. Occasionally they do breed - the CBC records them as breeding about once every four years with insufficient records to indicate breeding in about the same number of years - leaving no record of them in the wood during the breeding season in about half the years. Is it a winter visitor or a breeder? It will be interesting to see if they are mapped this year by the CBC or if we catch any recently fledged juveniles later on.

Wren 6 JTE798 02/04/2023 E04

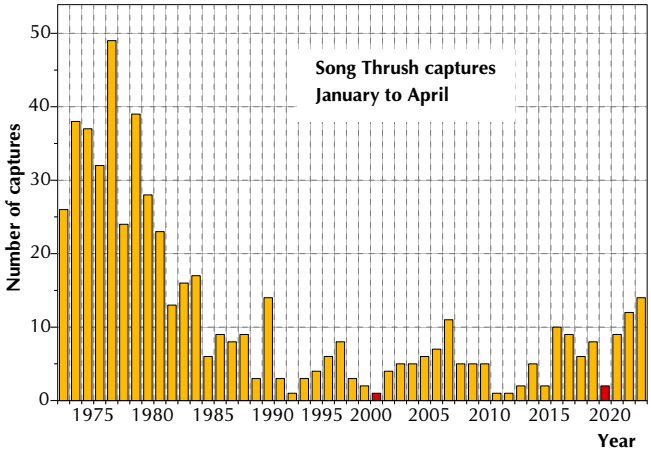
We can age most Wrens reliably on the number of spots on the fourth primary and by whether the spots on all the primaries form lines or are arranged higgledy-piggledy. It is likely that the spots on any feather result from differences in metabolism during the day and the night when the feather is growing. Nestling Wrens grow their primaries at the same time whereas moulting adults regrow primaries sequentially. This will explain the differences in arrangement of spots in the two age classes. As for the number of spots. With one spot per 24 hours of growth, feathers grown more quickly will have fewer spots. Nestlings need to grow feathers rapidly. Adult moult can be slower and that will give more spots.

But there always have to be non-conformists and this bird is one of them. It was definitely an adult as it had been ringed in 2021. Its spots were of the adult, non-linear pattern but the fourth primary had only 8 spots. One

possibility is that it moulted very late last year (perhaps having reared a late brood) and so moult had to be done at a more rapid pace before the autumn set in.

Song Thrush 6 RX91282 19/03/2023 Q01

This is one of four Song Thrushes caught on the day, the other three being new birds. Song Thrush numbers seem to be continuing to creep up after the very low numbers since the mid 1980s. The graph shows the total numbers of captures in the first four months of the year from 1973 onwards. The slow increase is encouraging but it is salutary to compare the rapid rate of decline in the early 1980s with what, we hope, is a long term recovery.



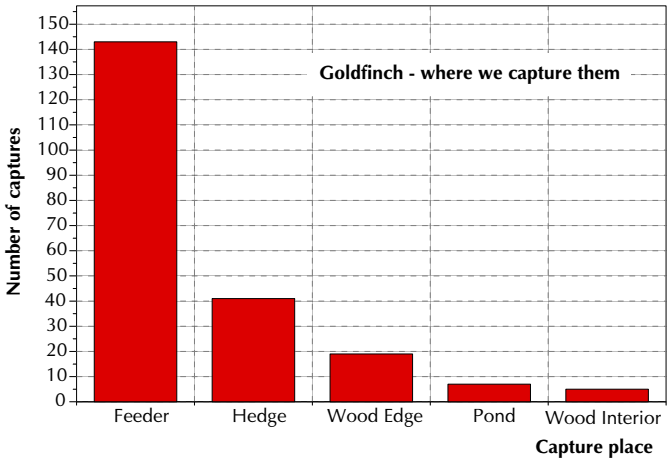
Two years are highlighted in red - 2001 and 2020. In the first year visits were lost because of the Foot and Mouth outbreak. In 2020 it was the lockdown that reduced the numbers caught. In spite of the lost visits of 2020, that year's total was higher than in the lowest three 'normal' years.

Mistle Thrush 4F LK39322 07/05/2023 H04

The first Mistle Thrush we have caught since 2015 with a second bird caught at the same time in an adjacent net. The other was a male so it appeared to be a breeding pair caught near a nest (which could well have been nearby but in the inaccessible area surrounded by deer fencing). A week later we saw a newly fledged Mistle Thrush in the same place - definite breeding success this year for the species.Overall we have caught Mistle Thrushes only on 23 occasions, that is, on average, less than one every two years. Catching two at once, at first, seemed a very rare event indeed. But, as we have noted before, impressions are not always supported by evidence. On five of those occasions we caught two birds and on one occasion we caught three. Two of these events involved an adult and one or two juveniles. The other four, all but one in May, have been of two birds caught at the same time in the same, or adjacent nets. So, catching Mistle Thrushes in the wood is a rare event but, given such a rare event has happened, the chance of catching more than one is quite high.

Goldfinch 5F AEZ3305 30/04/2023 D09

In the 50th Anniversary Issue of TWITTER we noted the increasing number of Goldfinch captures in the last few years. This is the sixth we have already caught this year (compared to an overall average of just four a year). It was caught in a standard site mist net rather than one set near a feeding station or at the northern edge of the wood where they commute between the gardens opposite and the wood. This is unusual. Apart from when they come to a feeder we rarely see them other than in the tree tops or, sometimes at low level, feeding on thistle or teasel seeds in a glade. The graph shows all the the capture circumstances of Goldfinches in the wood. After captures at a feeder, the most frequent capture place is the northern hedge opposite Wood House. That catches commuters between the garden and the feeding station nearby in the wood. Next are captures at the wood edge (i.e. within 25 metres of the edge). The few captures at the Pond were in 1976 in the drought when the pond held much more water than plant growth. That leaves captures in the wood interior - more than 25 metres from the edge - a mere 4% of the total.



10-Week Summary: 2023 Interval 2, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	**5**	**3**	**Adult**	**5**	**3**	
Coal Tit	.	.	.	.	1	.	1
Marsh Tit	.	.	.	2	1	.	3
Blue Tit	.	6	.	3	3	.	12
Great Tit	.	3	.	6	5	.	14
Long-tailed Tit	.	.	.	3	.	.	3
Chiffchaff	11	.	.	.	.	.	11
Blackcap	6	.	.	1	.	.	7
Goldcrest	1	.	.	.	.	.	1
Wren	2	2	.	3	2	.	9
Nuthatch	.	.	.	1	.	.	1
Treecreeper	1	.	.	7	.	.	8
Blackbird	2	2	.	6	2	.	12
Song Thrush	4	2	.	3	.	.	9
Mistle Thrush	1	1	.	.	.	.	2
Robin	1	5	.	3	1	.	10
Dunnock	2	4	.	5	.	.	11
Chaffinch	.	1	.	.	.	.	1
Bullfinch	.	.	.	2	.	.	2
Goldfinch	.	1	.	.	.	.	1
Totals	**31**	**27**	**.**	**45**	**15**	**.**	**118**

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	198	288	253	177	864
Minimum	57	33	89	66	59	364
Mean	92	115	159	130	126	611

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 - 2017	93	133	151	109	120	606

Last 20 years

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	534
2012	69	125	132	66	72	464
2014	83	132	181	123	120	639
2015	105	123	136	137	158	659
2016	102	185	193	109	109	698
2017	106	198	163	150	163	780
2018	95	108	182	184	119	695
2020	120	---	---	93	174	(387)
2021	...	163	129	90	109	(491)
2022	83	120	175	99	131	608
2023	106	118				

Appendix - Old Greater Covert and Alula scores

These results are here in order for us to understand what we can gain from recording these scores. With understanding we will be better placed for the future. Perhaps we should note that the data in the BTO national trial, just for Blue Tits, did produce a number of conflicting records, so we are not alone.

Old Greater Covert discrepancies

Birds have 9 greater coverts of which none, some or all may be moulted during post-juvenile moult. Once post-juvenile moult is over, the number remains the same except for accidental losses which may, or may not, result in a new feather being grown. A score of 0 indicates both counts were the same, a score of 1 indicates a difference of 1 in the recorded number of old greater coverts and so on. The **% agreed** column shows the percentage of pairs of records which were the same. For species where there are very few records, calculating a percentage rate would be meaningless.

Species ↓ Discrepancy →	0	1	2	3	4	5	8	Total	% agreed
Blackbird	25	13	3	2	2	.	.	45	56
Blackcap	1	.	.	.	.	.	.	1	.
Blue Tit	333	27	8	2	4	.	.	374	89
Bullfinch	4	1	.	.	.	.	.	5	.
Chaffinch	1	.	.	.	.	.	.	1	.
Coal Tit	287	115	27	7	3	1		440	65
Dunnock	2	.	.	.	.	.	.	2	.
Goldfinch	.	1	.	.	.	.	.	1	.
Great Tit	110	1	10	5	.	.	1	127	87
Great Spotted Woodpecker	1	1	.	.	.	.	.	2	.
Marsh Tit	1	3	1	.	.	.	.	5	.
Robin	113	47	4	3	1	1	.	169	67
Song Thrush	.	.	.	.	.	1	.	1	.
Wren	2	1	2	.	.	.	.	5	.

The results are interesting in that it they show that Blue Tits and Great Tits (with 89% and 86% of the records in agreement) appear to be relatively easy to judge, whereas Robins and Coal Tits with 67% and 65% of records in agreement are more difficult. Perhaps it is time to do some analysis using the photographic records of Robin wings which we are accumulating. Do we have a volunteer for this?

Alula discrepancies

The Alula, or bastard wing, has three feathers. The outer is large, the middle medium sized and the inner tiny. A new outer feather scores 2, a new middle scores 1 and the inner is not scored (even if it can be found). The Alula score is the sum of the scores for the outer and middle feather. Thus 0 means neither have been moulted, and 3 means both have been.

Species ↓ Discrepancy →	0	1	2	3	Total	% agreed
Blackbird	1	.	.	.	1	.
Blue Tit	406	50	67	67	590	69
Coal Tit	7	.	.	.	7	.
Great Tit	100	29	31	13	173	58

With scores of 69% in agreement for Blue Tits and 58% for Great Tits, we obviously have more difficulty judging the state of the alula than we do of the greater coverts. We know from our discussions over birds in the hand how difficult some Great Tits can be. However we think it is still worth recording as a reminder of the moult process, an understanding of which is so important in being able to age birds.

Where now?

What should we record in future? As with other things, being prompted to record them reminds you to look at them critically as part of the ageing process. However, if you have looked at them, then it makes sense to record them. If, though, it is a difficult species as far as these features are concerned but relatively easy using other criteria (e.g. Wrens with wing spots) then it will be better not to prolong the bird handling in order to obtain information which may not be very reliable.

We hope that these results prompt constructive discussion in the group and that we will be able to learn from them and (perhaps) improve.