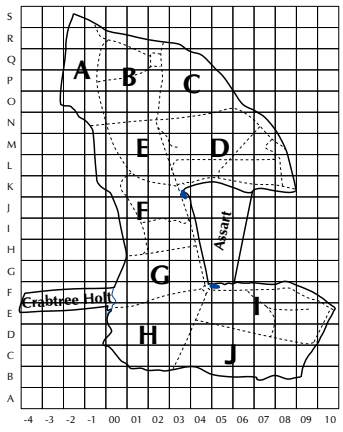
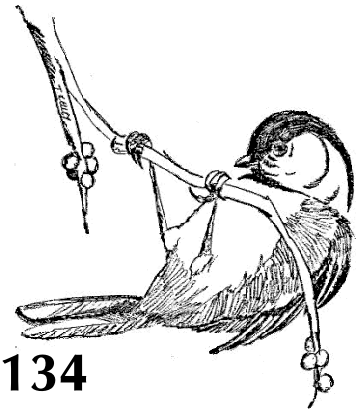


TWITTER

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

October 2021 Treswell Wood IPM Group

(Integrated Population Monitoring)



Project leaders:

CBC	Ellen Marshall
Nest Records	Chris du Feu
Ringing	John Clark

2021/4

Number 134

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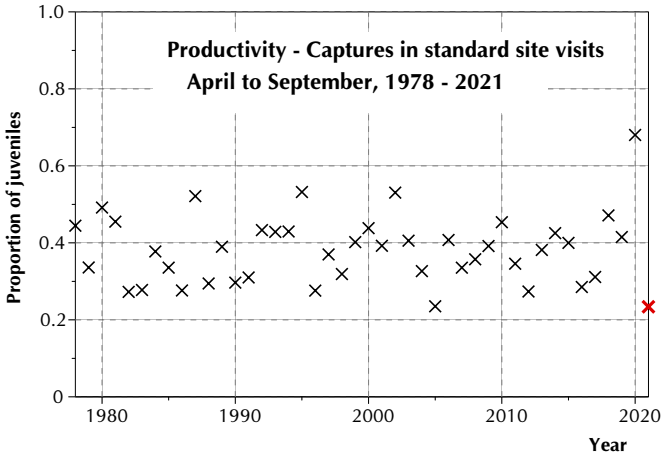
The weather over the last ten weeks has been very favourable for ringing - little rain and low wind. This means that, for once, we have been able to carry out the seven standard site visits exactly according to the ideal timetable. Quite a change from recent times where we have suffered disruption from both weather and covid restrictions.

We felt we had been catching rather fewer birds than usual at the standard sites. However, our low total of 90 birds is by no means unprecedented - we have seen lower totals in nine of the 44 years of standard site ringing. This total, though, is well below the average of 127; the highest year was 1995 with 253 captures. So a poor year but not as terrible as we might have thought at first glance. Where we have undoubtedly seen lower numbers is at the feeding station. Normally we expect large numbers of juvenile tits to be caught there. This year the numbers have been extremely small. The bird feeders have not been emptied as fast as usual; some weeks it seems that food has barely been touched. This reinforces the comments made in the previous issue of TWITTER. We had enjoyed higher than average numbers of adults in the second 10-week period and had hoped for a successful breeding season. Higher numbers of potential breeding birds - but what about overall productivity?

As a measure of productivity we can examine the proportion of juvenile captures in our standard sites. This data series runs from 1978 onwards. Using just data from April to September we have a reasonable measure of the breeding adult abundance - by April the resident population will be fairly stable and summer visitors will be arriving. The graph shows these productivity numbers. Note that a productivity of, say, 0.5 does not mean that on average each pair in the wood produced one young. Adults have more chance to be caught as they are present from April to August, juveniles only start being caught in late May or June after fledgeing. However, between-year comparisons are generally reliable. It is quite clear from the graph that there is no long term trend in productivity but it seems to vary unpredictably. The best year by far seems to be 2020 but we must realise that we caught no birds at all during the lockdown period reducing the potential adult numbers considerably (and that really does show the value of long-term, standardised effort). This year has the lowest productivity we have ever recorded, albeit only by a small margin. Overall it is a season with good numbers of breeding birds coupled with dreadfully low overall productivity.



BTO Ringing Report 2020

The BTO Ringing Report for 2020 was was published on-line towards the end of September. You do not have to be a ringer to read it - look at the BTO web site and search for Ringing Report 2020. Naturally the first thing is to look at our contribution and it is very pleasing to see that we do have several honourable mentions. Retrap histories for the oldest few birds found in the county in 2020 are given. Here we have the oldest Great Spotted Woodpecker, Wren, Treecreeper and Long-tailed Tit; the second oldest Great Tit, Nuthatch and third oldest Blackbird. One of our Blackcaps made the longest within-Britain movement (111 km westwards to Warrington) and the longest movement of a Nottinghamshire Bullfinch was to Peter Cobb at Darlton, a mere 7 km southwards - not as far as the Blackcap. Surprisingly there were only two Sparrowhawk recoveries in the county and we provided one of them - an even shorter movement than the Bullfinch, just as far as South Leverton, 2km north-eastwards. A Blackbird we caught at the start of the year was one of three foreign ringed Blackbirds to be found in the county.

In the 'old days', before recapture information was submitted to the BTO electronically, all the ringing report could

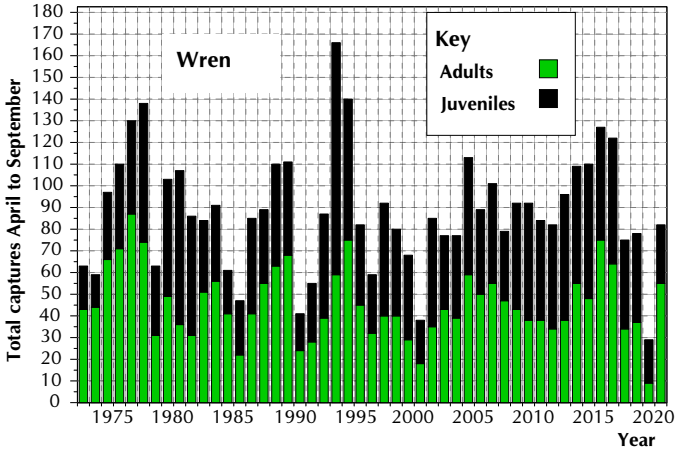
discuss was long-distance movements and dead recoveries, together with any exceptional local retraps that ringers reported on paper. The interest for many ringers was to have one of their birds found at some distance or after a long time. In a way, such events are exceptional and miss the everyday movements (or lack of them) of so many birds. With local retrap data now being submitted electronically, these very many every day, 'boring', short distance and short time movements now can provide a much fuller picture of bird demography than we could ever have known in the 'good old days'. As John McMeeking used to say - *Record what is there, not what is rare. What is recorded is history; what is not is mystery.*

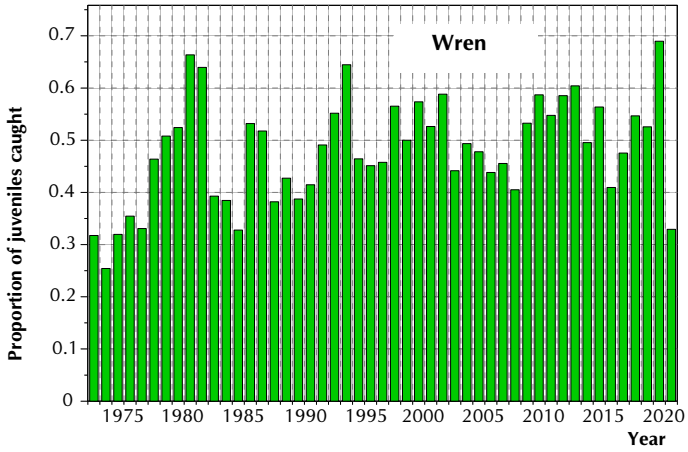
Overall a good read and a pleasing number of references to Treswell Wood. John would have been delighted.

Wren and Blackcap numbers and productivity

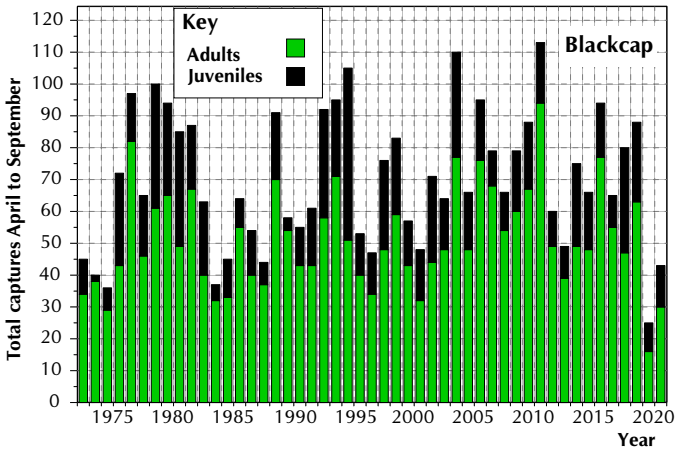
In the previous issue of TWITTER we looked at the fortunes of Song Thrushes and Chaffinches from the point of view of the annual captures and productivity using the annual ratio of juveniles to adults. We found that our gut feelings about increases and decreases for these two species were justified by the data. We also wondered about Blackcaps and Wrens but decided to wait until this issue of TWITTER before looking at them. This was because Blackcaps, being summer migrants, breed later than residents and Wrens are multiple brooded with a long breeding season. It would not be until later in the year that we could have an idea of the productivity.

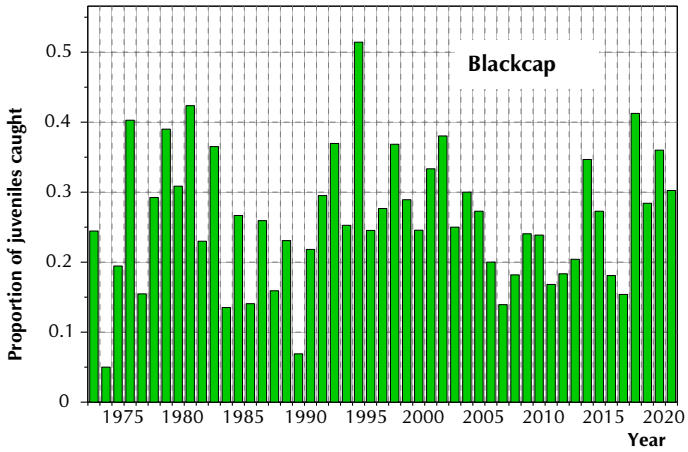
The graphs below have been produced in the same way as those in the previous issue of TWITTER for the other two species but with the time extended to September rather than July.





Wren populations are very volatile because of their susceptibility to hard winters coupled with high breeding potential. The adult numbers do not show any long term trend and the effect of bad winters - such as 1978/79 can be seen clearly. (Note that the numbers for 2000 and 2020 are not representative because of the reduced numbers of visits resulting from foot and mouth and covid restrictions respectively.) We know from our paper *Site tenacity and survival of Wrens and Treecreepers (1995)* that Wren survival is density dependent. It would be worth looking at these productivity figures - a superficial look suggests that productivity is also density dependent.





Like Wrens, Blackcaps do not seem to have any long-term trend in numbers and productivity seems extremely variable indeed. This year has given us the smallest number of captures but, in spite of a small numbers of juveniles, productivity has been well above average. Given the smaller Blackcap clutch size and shorter breeding season than Wrens, it is no surprise to see this measure of Blackcap productivity is lower than that of Wrens.

These two species do, overall, paint a more positive picture than that which was given in the previous issue for Chaffinches and Song Thrushes. It is not doom and gloom for all species.

More on Marsh Tits

We knew we had a very good track record with Marsh Tits but, until the past couple of weeks did not realise quite how valuable was our data set in regard to the species. First came the 2020 BTO ringing report. Only two Marsh Tits were mentioned specifically - both Treswell Wood birds with the longest recapture histories in Nottinghamshire and one of these gave the second longest history for the year nationally. The table below gives a breakdown of Marsh Tit encounters nationally, in Nottinghamshire and in Treswell Wood during 2020.

Area	Pullus	Juvenile	Adult/Full Grown	Total	Recaptures
Britain and Ireland	195	477	341	1,013	884
Nottinghamshire	33	11	1	45	70
Treswell Wood	33	9	0	42	69

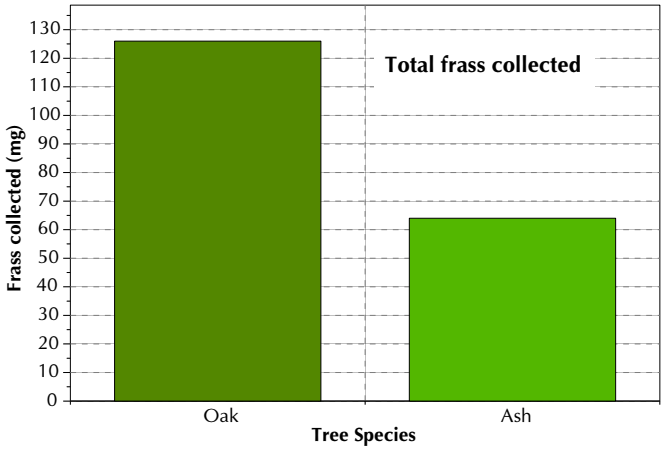
This is pleasing for the group, but it is very worrying that all the Nottinghamshire nestlings ringed were in Treswell Wood and only three full-grown Marsh Tits were ringed elsewhere in the county. As for recaptures, all but one were in Treswell Wood. This density of recaptures relates to our throughout-the-year ringing regime. As far as comparisons with the national picture are concerned, again we have a worryingly high proportion of nestlings ringed (16%), a much lower proportion of full-grown birds ringed (just over 1%) and a higher proportion of recapture events (8%). These last two figures, again, result from the Treswell Wood ringing operation which has always put a high value on recapture events.

We then received a request from the BTO to agree to the release of our Marsh Tit ringing and nest record data for a study. Although ringing data are regarded, quite rightly, as owned by the BTO, where any ringers or groups have submitted a significant proportion of records then the BTO will ask them for their agreement. We were told the request came from Dr. Marta Maziarz of the Polish Academy of Sciences currently at the Edward Grey Institute of Ornithology at Oxford. The study is being overseen by Rob Robinson of the BTO, Richard Broughton at CEH and Ben Sheldon of the EGI - all in very good hands. Of course we agreed but also realised that our territory maps from the CBC may be able to throw even more light on the species. The fact that we have also recorded a population extinction (in the hard winter of 1978/79) and subsequent recolonisation adds interest, as do the 70 nest records we hold. The study will use national ringing and nest record data. In addition more detailed records from Wytham Wood in Oxford and Monks Wood, where Richard Broughton has a long term study site, will be used. We are delighted that Treswell Wood will be added to these two special sites.

Timing of frass and tit breeding

We have again collected frass through the nesting season. Thanks to Ken Smith, as usual, for separating the frass from the dross and weighing the frass. The initial aim of Ken's frass work, which we began contributing to in 2011, was to compare the timing of tit breeding with that of the caterpillar crop. As reported earlier, results from Treswell Wood and Ken's other study sites have been published. A second, and in retrospect, rather obvious study is to look at the tit breeding success in relation to the total abundance of frass, irrespective of timing. Ken reports that Malcolm Burgess who has done much of the analysis of the results now has an MSc. student who will be using the data from all Ken's sites over the last decade to look into this. We await results with interest.

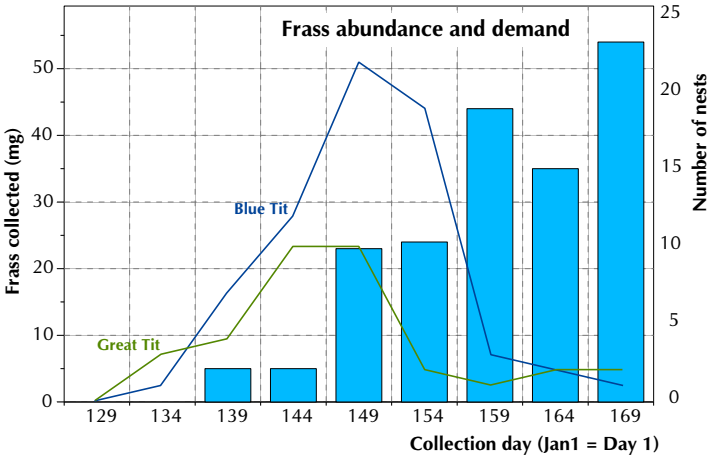
What of this year? Ken had one little surprise. Normally frass tails off as the season progresses. This year, after a very slow build-up the normal decline began in early June to be followed by an increase in the last week of frass collection in mid June. (We stop collecting the frass when the tits have finished nesting.) Ken did note that these late droppings looked rather different from typical and suggested it could be a different species of invertebrate responsible. He did also note that, with the late tit breeding season, we have had a later than usual start and end to the frass collection season. What species gives this extra, different frass? Does this happen each year but we do not see it because of stopping frass collection earlier? Do tits feed on this different species, whatever it may be? Interestingly, although as usual, in total more frass was collected under Oak than under Ash, during this last week it was Ash which gave half as much again as the Oak. It looks like there is room for another project here.



What about the timing? We had suggested earlier that there was a food supply problem for the tits which resulted in nestling mortality. We are now in a position to compare the timing of tit nestling demand with the caterpillar abundance. The graph tells the sad story and supports the idea that food was in short supply.

Peak food demand for chicks is ten days after hatching and birds will try to time laying so that this peak will

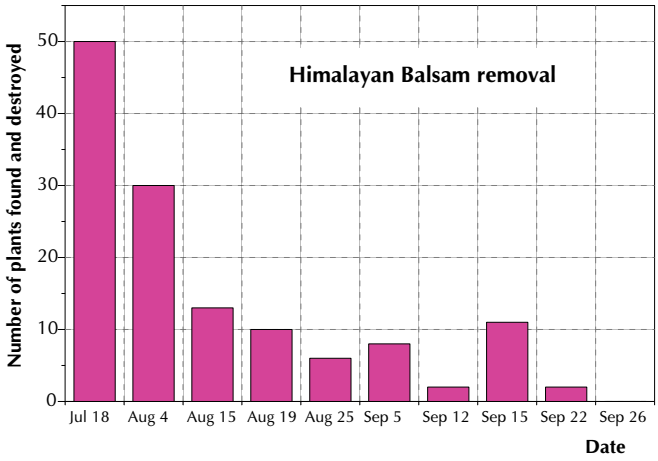
coincide with the caterpillar crop peak. The graph shows the bad mismatch this year. The bars show the frass abundance which we use as a proxy measure for caterpillar abundance. The two lines show how the numbers of nests at peak demand varied through the season. The few earliest nests were too early to catch the crop at all. For the bulk of the nests, peak demand was well before peak supply and by the time the crop was at its best the tit peak demand was nearly over. The late arrival of the unknown frass was too late for the nestlings. We knew that weather had been unfavourable to tits' breeding. This mismatch between nesting and caterpillar crop timing is another factor which seems to have driven the poor productivity this year.



Himalayan Balsam

In 2020 a patch of Himalayan Balsam was found in the south of the wood and this was described in TWITTER 129 of a year ago. We endeavoured to remove and destroy all the plants although recognised that it was likely that, even if we destroyed all the plants before they set their seed there would still be viable seeds from 2019 which had not germinated in 2020. We expect that there still will be some residual seeds which will germinate next year.

This year we looked at the area in July before any plants should have flowered. We removed and destroyed 50 plants. On August 4th we found another 30 had grown and the first were in flower. Thereafter we have visited the patch whenever possible. The graph shows the number of plants removed with a pleasing gradual reduction of the numbers found. As time went on, plants seemed to be germinating and growing much more rapidly but with much weaker, shorter and more straggly stems, the flowers were less brightly coloured. It seemed as if the species was making increasingly desperate efforts to reproduce in the face of approaching autumn with some plants growing and flowering within just a few days. On the last occasion, September 26, we were delighted to find no plants either in bloom or not. We think that we have arrested the spread of the plant in the wood but we will need to continue looking for, and destroying, plants for at least the next couple of years.



A single plant can produce up to 800 seeds and spread them explosively up to 7 metres from the plant. Last year the patch was about 15 metres in diameter so it appears that we had a single seed which arrived in the wood in some way in 2019, germinated, grew, flowered then spread its seeds over that area. In retrospect it would have been useful to count how many plants we removed last year. So far this year it has been around 130. The seeds are said to be short-lived and any more from the 2019 event which have not yet germinated should not last more than a couple more years.

Himalayan Balsam is on Schedule 9 of the Wildlife and Countryside Act, 1981. It is illegal to plant it or otherwise cause it to grow in the wild. Curiously, the act does not say that it must be destroyed when it is found in the wild. Although obviously the ancient woodland flora of Treswell Wood is better off without this invasive species, we could have just left it and stayed within the letter of the law. It seems to me a very fine line between *cause to grow* (which is illegal), and *allow to grow and reproduce* (which is legal).

The Assart and Ash Dieback

After our survey of tree growth in the Assart last year, and in the light of the unexpectedly rapid effects of Ash Dieback on saplings, we felt we had a sufficient series of observations to document the results. We are pleased to say that the article has now appeared in Conservation Land Management No. 19.3. (CLM is the sister publication to the more widely known British Wildlife). The article documents the story which has appeared bit-by-bit in previous issues of TWITTER. Had Ash dieback not struck, 95% of the trees in the assart would have been Ash. It is now very difficult to find any ash sapling over a metre in height which is not infected. Paradoxically, Ash Dieback is now resulting in a much more diverse tree assemblage in the assart which otherwise would have been even more over-

dominated by Ash than the wood. A view of the assart from the gate now reveals an area where Hawthorn is dominant. Close inspection will reveal increasing numbers of other woodland species which, all other things being equal, will eventually give a diverse woodland which we hope will include the 1% of Ash trees which are resistant to the dieback.

Noteworthy Encounters

Species **Age/sex** **Ring** **Date** **Grid**

Sparrowhawk **5F** **EY42364** **08/08/2021** **K00**

A female, the first Sparrowhawk since November 2020. We have wondered before whether the smaller number of females than males that we catch is because the much larger females can escape from mist nets more easily than can males. The obvious answer would be to look at the type of net where these birds have been caught - normal or deep-pocketed nets. We do keep a record of the length and type of every net we set so it was fairly easy to tabulate type of net against sex of the bird. The results? Most of our netting effort uses North Ronaldsay Fine nets, or equivalent. The deep pocketed nets are the SpiderTech make which we usually use as 'extra nets'. Alas, all but two of our nearly 100 captures of the species have been in North Ronaldsay or equivalent nets. The two in Spidertech nets were, of course, males. Not enough for any statistical analysis.

We then wondered about habitat in which the Sparrowhawks are caught. We can assign a coppice age to each capture. That becomes more interesting - although a full analysis of capture rates would require a great deal of work in tabulating net effort and also in allowing for the increasing abundance of the species through the years. However, lumping the habitat into three categories - Uncoppiced, Young coppice (0-9 years) and Dense coppice regrowth (10 years upwards) there are difference between the ratios of the two sexes.

The ratio of females to males is highest in young coppice, lower in uncoppiced areas and lowest in the dense, older coppice. Females are much larger than males so will find high-speed manoeuvres in dense coppice regrowth much harder than do males. Thus it is no surprise that they are less well represented in his habitat. As for the uncoppiced habitat, it is typical mature woodland with room for manoeuvre between the mature trees provided the understorey is not too dense.

Sparrowhawk captures - sex and coppice

Coppice type	Female	Male
Newish	10	16
Oldish	3	20
Uncoppiced	13	34

Great Spotted Woodpecker 4M **LK39135** **01/08/2021** **Q03**

We have not captured as many woodpeckers recently as in the past few years. Normally we capture juveniles at the feeding station soon after they fledge - none so far this year. Six of the seven birds we have captured this year have been retraps. This one was ringed this year and this is its first re-encounter and, indeed to only within-year re-encounter of any of these seven woodpeckers. As so often, this capture was at the feeding station.

Tawny Owl **8** **GM40961** **22/08/2021** **D04**

It is unusual to catch this nocturnal species in mist net during the day. Sometimes they may be mobbed by small birds whilst roosting. This can force them to move during daylight.

Tawny Owl **8** **GK18355** **29/08/2021** **N-1**

... and even more unusual to catch Tawny Owls in successive visits. Unlike GM40961, this bird has a long history. It was ringed in December 2017, a mere 200 metres from today's capture. We then retrapped it, again in a mist net, in June 2010. No sign of it since then until this capture 13 years and 245 days since it was ringed. It is our oldest live re-encounter of the species. The other longest Tawny Owl re-encounters are an eclectic collection. The oldest, at 14y 78d was found dead in Low Burnham, near Epworth; next, at 9y 357d was a nestling-ringed bird from nearby Headon which we found nesting in 2006; after that come two road deaths outside the wood over eight years after ringing (one as a nesting adult and one as a nestling).

Woodpigeon **4** **FH74623** **05/09/2021** **G04**

Woodpigeon numbers have increased massively in recent years. It seems to result from greater food availability over winter thanks to autumn-sown cereals. However, their expansion has included a big increase in suburban and urban habitats in addition to increasing numbers in the wider countryside. It is now the second most common species (after Blackbird) recorded by the BTO Garden BirdWatch survey (www.bto.org/our-science/projects/gbw - joining is, for the time being free). With this increase it seems surprising that we do not catch more in the wood. The last one we caught, ringed by John McMeeking himself, was in 2017.

Marsh Tit **4** **L327798** **01/08/2021** **Q03**

It is 8y 62d since this bird was ringed as a nestling in the wood - still three months short of our internal age record

and three years short of the national record. We retrapped it several times until the end of 2015, usually in the north-east part of the wood. We then did not encounter it again until late 2019, again in the same part of the wood. In spite of not ringing during the lockdown we did manage to catch it twice more in 2020, again in the same area. Marsh Tits are very sedentary indeed. The mystery is why we did not catch it during those four years even though we set nets in the standard site every ten weeks. It is most unlikely that it had wandered away.

Marsh Tit 4 S078947 19/09/2021 Q04
This is the second Marsh Tit we have PIT-tagged. It was ringed as nestling in 2018 in south of wood and only caught in the north thereafter including one capture as a nesting female.

Blue Tit 3J AAL8773 12/09/2021 E10
This is the first recapture for this 2021 nestling-ringed Blue Tit. We have felt that we were catching rather few of this year's cohort. Is it, as so often, looking back to the 'good old days' when we retrapped so many of the nestling ringed birds? In this case, our feelings have been worryingly justified. The cumulative total of nestlings of the year up to an including 2020 retrapped by mid-September of the natal year is 503 out of 6745 which fledged - just under 7.5%. This year we have only retrapped seven out of the 207 which fledged - 3.4%. That is not only half the expected rate but also statistically significantly lower. This means that immediately post fledgeing survival has been much lower than usual or that more survivors than usual have moved out of the wood. With the unusual weather conditions during the post fledgeing period it seems likely that survival rather than emigration is the problem. Without nest records for open nesting birds we cannot tell if they have suffered in the same way, although the apparently low numbers of birds present in the wood do suggest low post-fledgeing survival generally.

Blue Tit 6 AVC3459 01/08/2021 Q03
After a very long gestation period, we are able to begin PIT tagging selected birds. We listed Blue and Great Tits which had been caught during 2020 at the permanent feeding station in the north of the wood and also caught anywhere in the south of the wood. If we retrapped any of these then we would know they were likely to appear again at the feeding station where the PIT tag reader will initially be and that they were experienced, surviving adults which roamed widely in the wood. This bird was the first - a fitting one too. It is one of our own nestling ringed birds from the 2019 cohort with previous captures in both 2019 and 2020. As so often with carefully planned operations, the natural world does not behave as hoped. The nearly 40 birds on the target list seem to have developed a severe aversion to further recaptures.

Great Tit 4 ANA7641 03/10/2021 Q03
Sexing Great Tits on the basis of the width of the black feathering on the underside is reputed to be easy and, in most cases, it is. However, some individuals are problematic. This bird is one of those. It was ringed in January 2019 as a first winter female but on retrapping in February 2019 a note was made that the sex was not obvious. In early September 2021 it was sexed as a male and on today's capture we were not able to decide which it was. Sometimes, as on this occasion, it is better to record a code for unknown sex (or age) rather than risk an incorrect assignment.

Great Tit 4F ANE3463 29/08/2021 Q03
More on the Grey Tit saga. When we ringed this bird in March 2021 it was noted as having the very grey plumage. A year later in April 2021 it still had a grey plumage even though it had undergone a complete moult between the two events. Today it had nearly completed this year's moult and its plumage was normal. The grey plumage seems to result from lack of carotene intake during moult rather than being some genetic cause. We have many records of grey tits, usually after their partial moult in their first autumn. In their first full adult moult, a year later, they have gained a normally coloured plumage. This one is the first we recall which grew the grey plumage after its first full adult moult.

Nuthatch 2F TT49208 19/09/2021 P01
When we last caught this bird in April it was our Nuthatch age record holder. It has now extended this record by another three months to 5y 309d since ringing. Even at this age it is still only half way to the national longevity record of 11y 10m.

Goldcrest 3J 15/08/2021 N03
Still in juvenile plumage so is likely to be near natal site, this bird is almost certainly a very local bird, possibly even a Treswell Wood product. This was followed by two more on 19th September - another juvenile and a moulting adult. The juvenile would seem to be too early to be an autumn migrant and it is most unlikely that a moulting adult comes from anywhere else than the wood. Typically Goldcrests are recorded as breeding or probably breeding in the wood by the CBC one year in two with a maximum territory count of five in 2017. However, in years where at least one territory has been determined almost invariably it has been only one.

Chaffinch 4M Z782875 19/09/2021 Q03

In the previous issue of TWITTER we noted how this species had been declining in recent years. Including this bird we have only caught 12 this year so far - that compares very badly with our annual average of 80 captures. The previous capture this year was in May; no juveniles have been caught. This bird had been ringed in 2017 as a juvenile and retrapped in 2018 and not again until now. On this occasion it had developed very severe scaly leg mite - had it not already been ringed we would not have been able to ring it. Indeed part of the inscription was already covered by the scales. The following week we caught three more Chaffinches of which one was very badly infected and unringable, the other two were clear of the mite. Nationally their numbers have fallen to such an extent that the BTO has launched the Chaffinch Appeal in order to fund research into the cause. Scaly leg mite is one suspected factor, as is trichomonosis which is known to have caused a decline in numbers of Greenfinches in recent years.

10-Week Summary: 2021 Interval 4, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	**5**	**3**	**Adult**	**5**	**3**	
Sparrowhawk	.	1	.	.	.	.	1
Woodpigeon	1	.	.	.	.	.	1
Tawny Owl	1	.	.	1	.	.	2
Coal Tit	.	.	1	1	.	.	2
Marsh Tit	.	.	1	1	.	1	3
Blue Tit	.	.	1	.	.	.	1
Great Tit	.	.	.	1	.	.	1
Long-tailed Tit	1	.	.	1	.	.	2
Chiffchaff	1	.	2	.	.	.	3
Blackcap	.	.	6	1	.	.	7
Wren	2	.	16	.	2	1	21
Treecreeper	.	.	2	3	.	.	5
Blackbird	2	1	6	3	.	.	12
Song Thrush	.	.	2	.	.	.	2
Robin	1	.	11	3	.	1	16
Dunnock	.	.	4	4	.	.	8
Bullfinch	.	.	1	2	.	.	3
Totals	**9**	**2**	**53**	**21**	**2**	**3**	**90**

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	131	127	617

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	150	109	120	605

Recent Years

2018	95	108	182	184	119	688
2019	113	131	170	152	129	695
2020	120	---	---	93	174	(387)
2021	...	163	129	90		