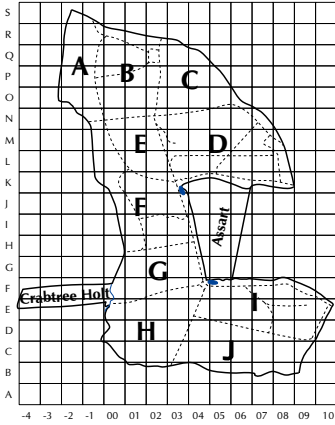


TWITTER



Treswell Wood - Information To Tell Every Recorder

May 2021 Treswell Wood IPM Group
(Integrated Population Monitoring)

Project leaders:

2021/2

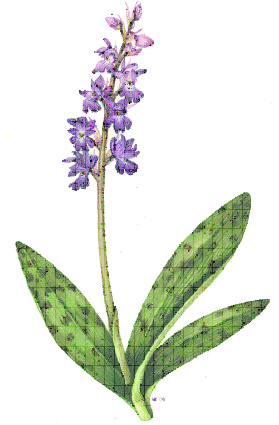
CBC Ellen Marshall

Nest Records Chris du Feu

Number 132

Ringling John Clark

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We had planned to begin the second of our five annual cycles of standard site visits (after missing the whole of the first cycle) on the earliest possible date. However, it was not covid-related restrictions which delayed us by a further week: it was wet and windy weather. We started the following week but weather later forced another delay. The very dry spell followed. All was well for the ringing but not so good for the frogs. For the second year running the ditches with tadpoles dried out and the tadpoles died. The drought broke and wet and windy weather returned. Fortunately we do have some weekends slack in the standard site system and the last visit of the second cycle was made on the last possible date.

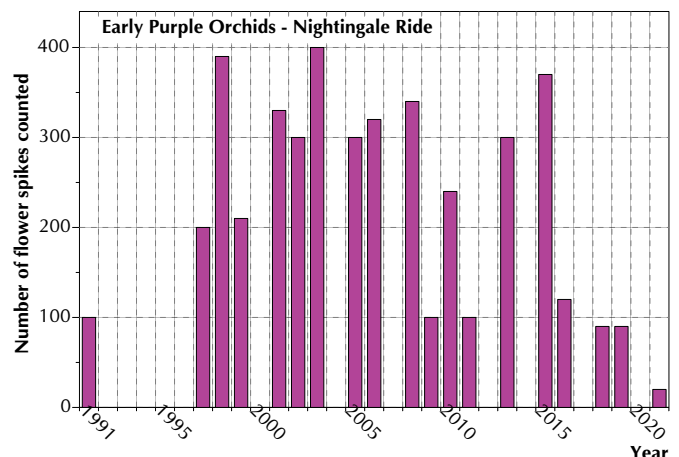
Numbers of birds on the standard sites have been well above average and the three highest ever totals for this interval have been in the last four years. This is pleasing (although we must bear in mind Fritha West's conclusions to her projects - beware of using a single measure of success). Of note, Song Thrushes are more in evidence than usual and Wren numbers are high too. The Common Bird Census has been possible this year and has been going well. It is good that the census is back again after last year's unavoidable break.

So far we have caught no juvenile birds although we have all seen juvenile Blackbirds, Dunnocks or Robins in gardens. We have certainly not seen any open nests - normally we expect to see Blackbirds or thrushes flushed from nests on our nestbox rounds - none seen this year so far. Is there a problem in the wood? Yes, just the usual one of human memory comparing this 'terrible year' with the golden years of the past. By the middle of May we have only caught 31 juveniles in total in all the nearly 50 years of mist netting - an average of under one a year. This year also seems to be a very late year with difficult breeding conditions. No panic yet about lack of juveniles.

Tits started nesting at about the expected time with a few early clutches laid. Then the weather deteriorated and the very cold nights seemed to depress nesting activity. Some nests were left for a week or two before the birds restarted building. Some tits suspended laying and some just left a full clutch of eggs unincubated for about 10 days before sitting. The current wet weather is not at all good for nestling tits and it remains to be seen how badly this affects the breeding success. The modified dormouse boxes are working very well as far as the tits are concerned - not one tit nest found in any of them - just one Wren nest. On the other hand, dormice have invaded a couple of tit nestboxes where eggs had already been laid, usurping the nests built by the tits.

Progress is being made with the PIT tagging project. A trial feeder is now in place and it has proved to be squirrel resistant. The electronic hardware and software are being worked on and we hope to be able to PIT-tag the first birds in the next few weeks. Provided the weather and covid allow, this project is looking good for the future.

In the last issue of TWITTER we noted the fine shows of Wood Anemones. It has been a wonderful year for them - they have been abundant and remained in bloom for a long time. Yellow Archangel used to be found only in a few small patches in the wood but this year what was previously just a handful of plants near the north-west wood edge can now be seen along 100 metre stretch of wood. Early Purple Orchids, on the other hand, have had a terrible season. Obviously the number of flowering spikes does not equal the number of plants and it is likely that many plants have just had a year's rest from flowering. Most years we have counted the number in one patch in the south-east of the wood. The graph shows how recent years, this one in particular, have been very poor for flowering. Other patches in the wood have also produced lower number of flowers than



normal this year. It is quite probable that this is just a particularly bad year for the species to produce flowering spikes and, if next year's spring weather is more typical, we will see the large patches we had become used to. Thanks to Lizzie Harper for her illustration of the Early Purple Orchid. More of Lizzie's work can be found on her web site - <https://lizzieharper.co.uk/> - well worth visiting.

Species records on Nottinghamshire Wildlife Trust Reserves

Many readers will be familiar with iRecord which is an application for submitting species records to the National Biodiversity Network data set. Once data are submitted they are, effectively, a part of the national collection of species records held by the Biological Records Centre. Anyone can enter records but before they reach the NBN database they must be verified by an expert, usually a volunteer. Michael Walker, for instance, is the verifier for mammals in Nottinghamshire. The NBN has been working with NWT and there is now a new data entry portal into iRecord which can be used for submitting species records made in any NWT reserve. The portal recognises all the NWT sites. The user need only enter the first few letters of the reserve name and that will locate the record. All records will be verified in the usual way.

What is in it for the NWT? The relationship with NBN is of mutual benefit. NBN obviously will gain species records. In addition to NWT having access to these records, NBN is giving NWT access to all other records on its reserves, whether these records come via this portal or by any other means and irrespective of how old they are. This means the Trust will have access to vastly more records, including historic records pre-dating the designation of sites as NWT reserves. NWT also has the security of all the species records being held securely in the national system. Everybody wins.

The data entry portal can be found at <https://record.nottinghamshirewildlife.org/>

Do not think that you should only submit records of unusual species. Remember the late John McMeeking's advice: *Record what is there, not what is rare. What is recorded is history, the rest is mystery.*

Seeing the wood for the trees:

Assessing biodiversity change in managed woodlands and restoration projects

In the previous issue of TWITTER, Fritha West told us about her master's study. It uses data from several monitoring operations including ours in Treswell Wood. She is in the process of finalising the work and has kindly allowed us to give an early summary of her conclusions.

Monitoring local changes in woodland ecosystems is of particular importance given the current biodiversity crisis but practical methods of assessment of biodiversity remain unclear. Many metrics for temporal biodiversity assessment have been identified, but these methods rarely translate into woodland management practice. Most guidance focuses on habitat as a proxy for biodiversity, an approach that has divided ecologists' opinions. Another common method is to use bioindicator species to assess biodiversity and ecosystem condition. By using both of these approaches to determine trends in biodiversity at a number of separate English case study sites, I have assessed the reliability of biodiversity-by-proxy methods. Case study ornithological datasets of 8 to 20 year time series reveal heterogeneous trends with frequent declines in diversity. It seems that bird species are influenced by both local habitat management and regional population trends. In order to appreciate case study communities in the context of their surrounding landscape, I compared case study bird and habitat change with BTO Breeding Bird Survey data and satellite imaging of regional woodland habitat. Comparison with regional woodland bird assemblages reveals unexpected results, as trends suggest increases in woodland bioindicator bird species diversity at the county wide level despite declines in woodland cover. Case study sites did not follow regional trends, and the discrepancy between habitat change and bird diversity change apparent at both the local and regional scales. I concluded that current biodiversity-by-proxy metrics are unreliable, and discuss the importance of considering biodiversity from multiple perspectives.

Conclusions:

Sampling effort and methodology must be consistent: As has been well presented in two case studies, consistent survey methodologies are essential for reliable quantification of biodiversity change. Ad-hoc surveys to determine species or habitat richness may be practical when development is ongoing and resources are limited, but they are of little use for formal analysis without consistent methodology and sampling effort. Baseline assessments for habitat and focal taxa must be undertaken even when habitat is judged to be of low quality with low probability of recording species of interest. Baseline estimates are essential in formal analysis and for judging conservation success.

Study design must stand the test of time: Survey design should also be carefully considered. Two particular case studies illustrated how consideration of scale and potential for habitat change must be included in the study design from the baseline year of observation. These two case studies also demonstrate how supplementary data and detailed knowledge of a site can be used to improve monitoring as the project progresses.

No woodland is an island: Paying attention to regional trends is key when monitoring small woodlands. Identifying increases or decreases in focal species is useful for site management and targeted conservation, but understanding will be limited if regional level population trends are not considered. The appearance or disappearance of focal species at a site cannot always be assumed to result from good or bad management, but inferences can be drawn once the impacts of wider scale drivers have been accounted for. Similarly, habitat features cannot be considered in isolation. Woodland management works better when done from landscape scale perspective, and diversity of habitat is always better for wildlife. The surrounding landscape and management practice must be considered so that management can adjust accordingly.

More information is always better: As has been illustrated in several studies, personal appreciation and first-hand experience of changes within the study site are of great value. Specialized analysis can be supported and often greatly enhanced by supplementary information, such as in the case of Willow Tit breeding failure in Treswell Wood. In cases where monitoring may be insufficient for formal analysis, informal understanding of biodiversity change may still be relied upon, and often serves as the basis for management decisions. It is clear that data collection can be intuitive and descriptive rather than following a hypothesis testing framework, and that the former approach often works better for small scale woodland conservation. Collecting a range of data is therefore useful and advisable whenever resources and time allow, to encourage deeper understanding of ecosystem change.

There is no one size fits all: Understanding biodiversity change requires more than calculation of a single value. Biodiversity metrics can inform our appreciation of change within an ecosystem, but cannot capture it in its entirety. Metrics must be considered as tools within a tool kit, from the crude to the complex. Appreciation of species richness is an essential component, but biodiversity monitoring cannot be limited to diversity for fear of missing threats to ecosystem stability.

Understanding your system: Managers usually seek to increase biodiversity of their sites, often focusing on boosting species richness rather than restoring ecosystem function. Though this is often a worthwhile goal in areas where the ecosystem has become depleted, care must be taken in determining functional natural levels of biodiversity suitable for the system in question. Many studies suggest focusing on restoring ecosystem function, rather than on particular specific or levels of species richness, may be more beneficial.

Change takes time: Analysis generally aims to identify significant trends as proof of conservation success, but sustainable change in forest communities takes time. Ongoing monitoring and constant analysis is therefore essential, as a lack of significant trends does not equal lack of change.

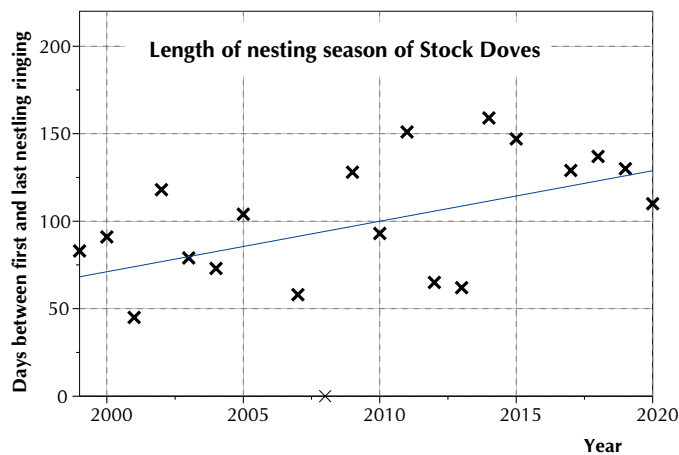
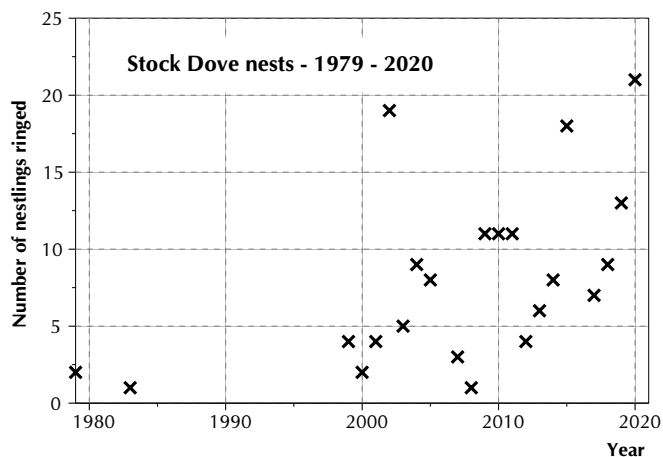
The central aims of this study were to quantify temporal and biodiversity change at selected case study sites by examining trends in habitat and bird diversity. Biodiversity trends are site specific, though most show significant declines in local bird diversity. Observed habitat change varies according to location, habitat type, available data and survey methodology, but also that habitat diversity and value does not directly relate to observed bird diversity. Although an understanding of habitat structure and quality is essential in biodiversity analysis, we conclude that the use of habitat as a proxy for biodiversity may be a flawed concept. Further research into this topic is essential for the development of reliable land management strategies and understanding of biodiversity change.

Noteworthy Encounters

Species	Age/sex	Ring	Date	Grid
Stock Dove	4	EY42335	4/4/2021	D03 Nesting

This is, at least, the third year in which this bird has nested in the same box. The first pair of Stock Doves nesting in our high boxes was in 1979 - the first year in which boxes were installed. A single nest in 1980 failed. After that none nested until 1983 when, again, a single pair nested. In 1999 there were two successful nests and, since then the number of nests has been generally increasing. In the earlier years there were spare large nestboxes and Stock Doves might alternate successive clutches between two boxes. This allowed the next clutch to be laid whilst the previous brood had not yet fledged and avoided the fresh eggs lying on the revolting accumulating layer of droppings which passes for a nest. With more pairs now present, but no additional nest boxes, birds generally have successive broods in the same box. Might ash dieback provide many more nesting holes in the next few years?

It is much more difficult to determine the exact laying dates of this species than it is for Blue Tits where we inspect boxes weekly. Another measure of timing of nests is the date of ringing nestlings. Over the years Stock Doves are nesting earlier but also prolonging their very extensive breeding season even further into the autumn. The two graphs show how the numbers of nestlings we have ringed over the years has increased. This does not give a completely true picture of the species' expansion. In some years they suffer much more predation by grey squirrels than others and lower numbers ringed in these years represents predation rather than fewer nesting attempts. The second graph gives the length of the nesting season, showing how it is increasing. The length is measured by the number of days between the first and the last nestling to be ringed. Again, the actual length of the season is longer because very late nests are often unsuccessful and therefore do not contribute to the length of season calculation.



Since 2000 the trend is an extension of the nesting season by three days per year.

Barn Owl **5** **FH74622** **4/4/2021** **H03 Roosting**

This is the first Barn Owl we have captured within the wood. It was a rather surprising capture - we had expected to find a Stock Dove in the box. Although Barn Owls do nest at Forwood Farm on the east of the wood, we very rarely see them within the wood. The box seems to have been used only for roosting rather than nesting. There were a few owl pellets deposited in the box yielding species records of wood mice, common shrews and both bank and short-tailed voles. Yes, these species records, like all our others, will be entered into the system.

Tawny Owl **6** **GR24215** **4/4/2021** **E00 Nesting**

We ringed this owl as a nesting adult in the same box in 2019. We did not find her in 2020 - indeed it seems as if no owls nested in the wood last year. All four eggs hatched but, as usual, the runt was very much smaller than the others. There seemed to be adequate food early on. At our first visit, before the eggs hatched, there was a larder of three wood mice and three short-tailed voles, all very neatly stacked in the box. By the time the larger three chicks were big enough to be ringed the runt had vanished, presumably having acted as a sacrificial larder for the elder siblings. On this later visit the box also held the remains of a Woodpigeon. How many small rodents have the food value of one Woodpigeon?

Tawny Owl **4** **GV40487** **4/4/2021** **K00**

Today was the first capture of this bird, caught in a mist net. We tend to think that a Tawny Owl mist net capture is a rare event compared to a capture in a nestbox. However, looking at the numbers we have now caught 18 individuals in mist nets, some retrapped a few times which is one more than the 17 adults caught on nests. As so often, the memory is not always consistent with the recorded facts. History versus mystery again.

Great Spotted Woodpecker 4F **CT95979** **25/4/2021** **N07**

Our second oldest Great Spotted Woodpecker at 10y294d since ringing. If she can survive another year and then be retrapped she will break our own internal age record and, possibly, the European record too. This is her 16th capture and the only one not at a feeding station.

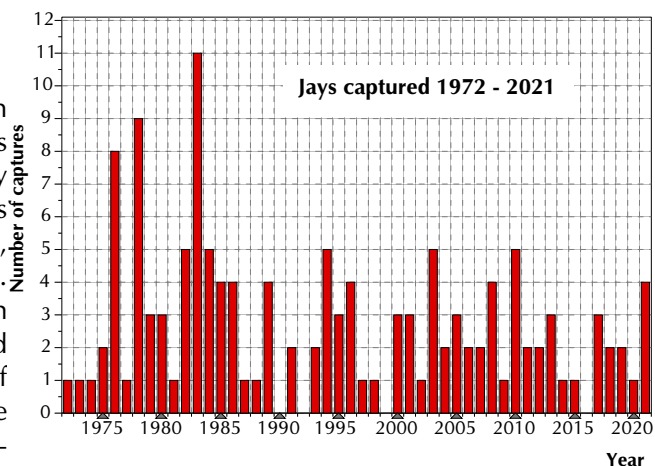
Great Spotted Woodpecker 4M **LE35264** **18/4/2021** **N01**

This is the 11th capture of this bird first ringed over 5 years ago. About 85% of our captures of this species are at feeding stations probably because they spend very much time above mist net level but have to descend to lower altitudes if they visit the feeding stations. This was one of the 15% of captures in a mist net not at a feeding station.

Jay **5M** **DS75980**

11/4/2021 **E02**

The average number of just under three Jays captured each year conceals great variation in the annual numbers. This bird was the first to be captured this year, followed by another three in May. The graphs shows how variable is the annual total. In some years, notably 1978 and 1983, there were well-documented invasions of Britain by Jays. These were thought to be mostly juveniles from Scandinavia where a good breeding season was followed by a poor autumn acorn crop. The birds had the choice of moving south-west in the hope of finding food or else starving. There were even reports of Jays heading south-

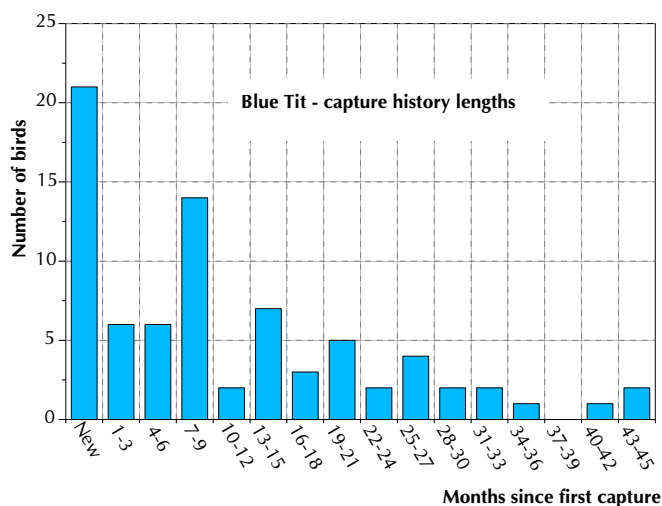
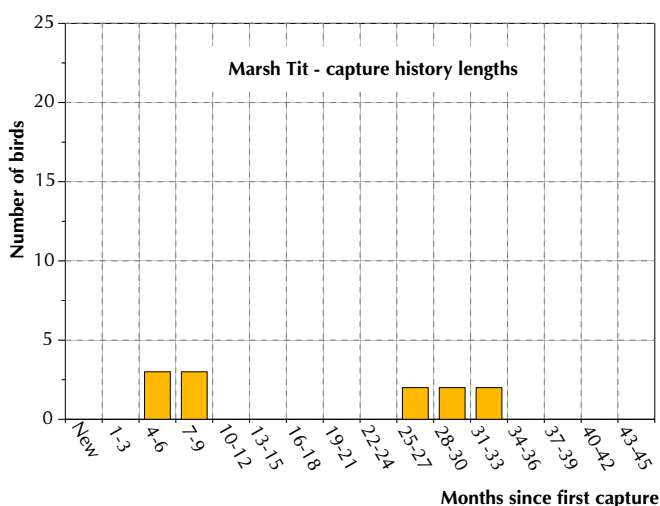


west off the tip of Cornwall still following the the urge to continue in the vain hope of finding food. The four captures we have had so far this year cannot be explained by such an autumn influx. None of these birds, however, were in breeding condition so might well be part of an excess of non-breeding birds this spring.

Marsh Tit 6F ANA7378 28/4/2021 M07 Nesting

A much-captured Marsh Tit ringed in August 2018 as juvenile. Because Marsh Tits are so sedentary it is likely she nested in the wood in the next two years although we never captured her again between February and August. This year we did capture her in breeding condition and, 10 days later, this capture as she was sitting on eggs in one of our boxes.

Our Marsh Tits seems to have longer capture histories than similarly-sized Blue Tits. This shows that they have a higher survival rate, The two graphs compare the capture history lengths of birds of these two species which we have captured this year. Of note is the number of 'New' Blue Tits - these will be mostly incoming birds, new to the



wood this spring. We have not captured any such Marsh Tits. They are so much more sedentary than Blue Tits. The lack of 'New' Marsh Tits supports the idea that the wood is acting as a source rather than a sink for the species. The 'missing tooth' effect of the Marsh Tit graph results from the small number of birds coupled with the lack of birds between one and two years old - possibly a result of not catching birds in the 2020 spring lockdown.

Blue Tit 5 AAR0828 11/4/2021 E02

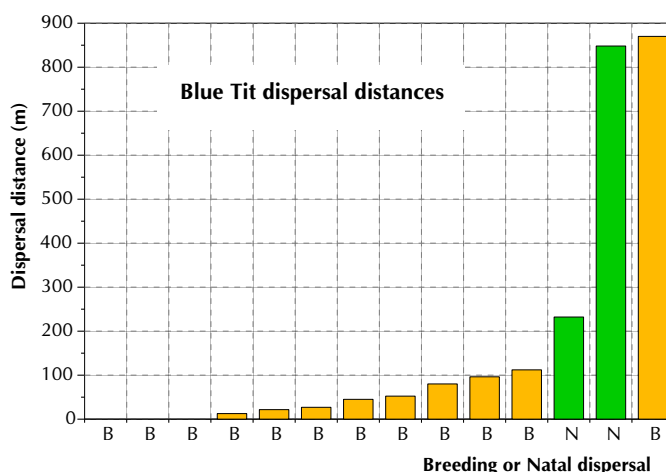
This was ringed by Peter Cobb in Darlton 8 km south of the wood in March and we have not recaptured it again since then. It is a first breeding season bird, probably searching for a breeding territory and then moving on after failing to secure one in the wood.

Blue Tit 6F AKJ0005 12/5/2021 N05 Nesting

Ringed by Glenn Thomas at Bothamsall 11 km south-west of the wood in January 2020. She is new to the wood as far as we know. However, it could well have nested here in 2020 because of the lockdown we missed catching a good proportion of the nesting Blue Tits. We cannot know for sure.

Blue Tit 6F ANA7077 19/05/2021 E09 Nesting

One of a dozen Blue Tits captured on eggs in a nestbox - this one has the longest nesting history. The three records we have of her nesting are all in the same south-eastern area of the wood but in different boxes. The graph shows the dispersal distances of all the Blue Tits which we have recorded in nestboxes this year which we also have recorded in boxes previously. Two types of dispersal are given - Natal Dispersal which is the distance between the nest where it was hatched and its current breeding site, and Breeding Dispersal which is the distance between nesting sites in two successive years. Each bar represents one bird in increasing order of movement. Clearly most birds move little, or not at all, between breeding attempts, although one bird has made an unusually long movement from the south to the north of the wood. On the other hand, both the natal dispersal movements are long. In fact the natal dispersal is under-estimated because any movements of over 1 km (and there are likely to be several) will take



them out of the wood and so not be recorded. Over the years we have recorded about 750 female Blue Tits nesting in two or more successive years and a further 130 nestling-ringed birds subsequently captured as a sitting female. Plenty of material here for studying local dispersal and what factors may influence it.

Blue Tit **6F** **AXD9716** **19/5/2021** **E06 Nesting**

Male Blue Tits are reputed to tend to use potential nest holes for roosting but this bird is a female. She was ringed as a nestling in 2019 and on two occasions out of three when we have found her roosting she was in this same box as she has nested in. On the other occasion she was roosting in an adjacent box. We did not find her nesting in 2020 and the box she is now using was used in 2020, unsuccessfully, by another Blue Tit. Her natal dispersal distance was 850m.

Great Tit **5F** **ADK1308** **18/4/2021** **N-1**

Yet another incoming tit. Dave Fogg ringed this bird at his home in Willingham as a juvenile in July 2020 about 14 km east of the wood.

Chiffchaff **4** **EHJ930** **25/4/2021** **N00**

Chiffchaffs, being so small, tend not to have long lives. To catch one nearly five years old is not a common event. Even better, it was not one of our birds but one ringed by Dave Fogg at Cottam Power Station, 6 km to the east in September 2016. When ringed it was a juvenile so probably moving southwards for the winter. We retrapped it a second time a week later so it seems that it breeds not far away. Where has it been in the intervening years?

Chiffchaff **4M** **JTE746** **4/4/2021** **K00**

This was the first caught although we had heard one singing on March 21st. Our earliest ever record of a singing Chiffchaff was on 9th March in 2008 and earliest capture on 12th March in 1995. As for earliness of captures, this one ranks as our 92nd earliest out of the 1,025 we have ever encountered. Definitely not an early year.

Blackcap **4M** **ANA7780** **4/4/2021** **M00**

A bird ringed in 2019, we missed catching him in 2020 but this year he was caught in exactly the same net as when ringed in 2019. Blackcaps often return to approximately the same place in the wood; this one could not have been closer.

Blackcap **4F** **ATJ8356** **2/5/2021** **D07**

A very pleasing incomer. It had been ringed in September 2019 at South Foreland in Kent as a juvenile female. That point on the coast gives the shortest Channel crossing. It may have come to the wood to breed in 2020 but, because of the lockdown restrictions we could well have missed it. In the past three Treswell Wood Blackcaps have been caught on autumn migration on the south coast - two at Icklesham and one at Beachy Head. Three more have been found abroad, one each in Belgium, Spain and Morocco.

Whitethroat **4** **AJN3524** **25/4/2021** **M04**

Keith had observed a Whitethroat working along the northern edge of the assart while he was doing his CBC. Almost as soon as he had returned to the ringing base and told us, this bird was found in a net - probably the same one. On average we have caught just one Whitethroat per year - it is a hedgerow and scrub rather than a woodland species. Like Jays the annual captures vary markedly - this is only the fourth we have caught this century whereas in the best year of 1979 we caught nine. Perhaps, as the assart goes into the scrub stage of ecological succession, we may see more of them.

Wren **5F** **AXD443** **4/4/2021** **L00**

Recapture rates of nestling ringed birds are much lower than those of birds ringed when fledged. Recapture rates of smaller species are lower than those of larger species. Recapture rates of short-lived species are lower than those of long-lived species. Wrens are small and short-lived so nestling ringed-Wrens are near the bottom of the recapture probability list. Any recapture of a nestling-ringed Wren is a welcome event and this capture was one of two such on the day - both birds ringed in 2020. Because of our throughout-the-year standard site mist netting we do have a better chance than most of retrapping our nestling-ringed birds. Our grand total of 127 retraps from 740 ringed nestlings is at least an order of magnitude better than typical for nestling Wrens. Of the 2020 cohort of 33 nestlings we have now retrapped four. One more in the next seven months and we will be up to our long-term average.

Blackbird **6M** **LE35201** **16/5/2021** **H04**

Not a record-breaking capture but, nevertheless, at 6y 64d since ringing this is a respectable age for a Blackbird. It would seem to be a summer visitor with its earliest capture being in mid-March and latest in late July. Where might it winter? Perhaps somewhere in the south-west of Britain? It was caught in a regularly visited standard site so it is odd that we did not catch it in the previous three breeding seasons.

Robin 4 ANA7771 25/4/2021 N07

Another Robin which proved difficult to age. The tips of most greater coverts had clear buff coloured wedges and, at first glance, it could have been taken for a first year bird. But, no, it was older than that. The key to identification of the age was that the outermost greater covert had no buff tip. At the inner end of the buff-tipped feathers they tended to be smaller but could have been regarded as ending fairly suddenly. This is not the only awkward Robin we have seen recently. If in doubt, look at the outermost greater covert.

Chaffinch 6M Z782208 21/03/2021 R00

We have caught several birds this year which seem to have 'missed' a year. The explanation is, of course, the lockdown which prevented so much ringing during the spring of 2020. However the missed years of this bird cannot be attributed to the lockdown. He was ringed in May 2016 and not seen again until now. Even odder, on both occasions he was in the north-west part of the wood, the two positions being no more than 100m apart. It is as if that part of the wood is his breeding territory. How could we miss him for all these years in spite of having netted at that site every 10 weeks.

10-Week Summary: 2021 Interval 2, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Tawny Owl	1	.	.	.	.	.	1
Great Spotted Woodpecker	.	.	.	2	.	.	2
Jay	.	1	.	.	.	.	1
Coal Tit	.	.	.	1	.	.	1
Marsh Tit	.	.	.	1	1	.	2
Blue Tit	2	2	.	6	8	.	18
Great Tit	.	3	.	10	3	.	16
Long-tailed Tit	2	.	.	1	.	.	3
Chiffchaff	15	1	.	3	.	.	19
Blackcap	10	.	.	3	.	.	13
Wren	1	9	.	1	6	.	17
Treecreeper	2	1	.	6	2	.	11
Blackbird	9	1	.	4	1	.	15
Song Thrush	4	4	.	1	.	.	9
Robin	3	5	.	4	1	.	13
Dunnock	6	4	.	5	.	.	15
Chaffinch	.	.	.	2	.	.	2
Bullfinch	1	4	.	.	.	.	5
Totals	56	35	.	50	22	.	163

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	160	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				(163)