

TWITTER

Treswell Wood - Information To Tell Every Recorder

May 2020 Treswell Wood IPM Group
(Integrated Population Monitoring)

Project leaders:

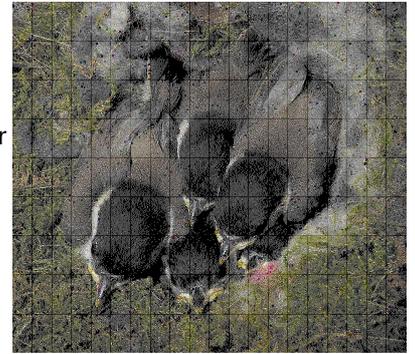
CBC Pat Quinn-Catling

Nest Records Chris du Feu

Ringing John Clark

2020/2 Number 127

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It has been a long and frustrating ten weeks since the last issue of TWITTER. It is only during the last week that we have been allowed to travel, so the first visit to the wood for just over seven weeks, on 14th May was a lovely opportunity to see the wood again, and a chance to check the nestboxes. We have missed recording the first egg dates of the birds, but were just in time to ring the first pulli - doubtless what the government had in mind with their timing in letting us back.

The broods in the boxes are doing well at the moment, and we were very pleased to find five broods of Marsh Tits, which bodes well for our planned PIT tagging and tracking of them, for which we have received permission from the BTO. We will be working hard to get the readers and feeders ready now.

The national lockdown and the current limit of a maximum of two people allowed to meet keeping 'social distancing' means that we cannot do the BTO CES ringing this year - the first missed year since the start in 1983. It is also clear that we will not be able to work to our own year-round constant effort ringing scheme fully this year. We have now missed period 2 of the annual five, and with the limits on the number of people allowed together we will not manage period 3. It is very much a case of hoping we will be able to manage do the full project ringing during the last two periods of the year starting at the beginning of August. This is the first time since the foot and mouth problems of 2001, when we missed six standard site visits (but were able to complete the BTO CES), that we have been unable to complete our internal throughout-the-year operation which we initiated in 1978. The CBC territory mapping is another casualty - the first year with no record of breeding territories since the operation began in 1973. One other project missed this year is the frass monitoring, but we will try to get an estimate of the caterpillar abundance from sampling leaf damage. Thanks to Ken Smith for help with that.

Getting back to the wood again was fascinating. Change is gradual when you visit weekly, and is not so dramatic. When we left in March the trees were still bare, only a few of the summer migrants had arrived, and the wood was very wet. Now the trees are in leaf, Blackcaps, and a Willow Warbler are singing, and the wood has dried out - rather too much for the tadpoles that were in the ditches I am afraid. As you would expect, the brambles have grown and this year the ash die-back is starting to show quite markedly on some of the mature trees, which have some large branches without leaves. The bluebells are nearly over, but the stitchwort is looking good, the Herb Paris is in flower, but we have missed the wood anemones and the early purple orchids - no flowering dates nor counts of blooms in the main orchid patches this year.

Its good to be back, let us hope the restrictions are able to be eased soon so that we can quickly resume more of the 'normal' activities.

John Clark

The lack of activity in the wood has reminded us of the opportunities for analysis of our data. Below is news of one major completed analysis just accepted for publication, some student dissertations which are leading to another major analysis, and a collection of suggestions for useful and interesting studies waiting to be addressed.

Nesting outcomes under anthropogenic change - effects of changing climate and nestbox provision on the reproduction of Great Tits *Parus major*

We were all delighted to hear that this paper has been accepted for publication in Ibis. The editor's comments were very positive: *This is to confirm that I am now formally accepting your paper. Thanks for final edits which I have accepted. Really enjoyed reading this manuscript and I am sure it will be a key reference in the future.*

We told Kirsty, John McMeeking's daughter, about the publication and she replied *Such good news! I can just see Dad sat in his chair grinning from ear to ear - but we can also see Dad going through the paper meticulously with his red pen!*

Thomas Bodey of the University of Exeter, writes:

Great Tits are one of the most well studied of UK (and indeed European) passerines. This is in part because of their robust nature to handling and manipulating, and because of their ready use of, and even preference for, nestboxes as breeding sites. These factors combine to make them excellent study subjects, and there are famous long-running studies such as the University of Oxford's study site at Wytham Woods which has been running for 60 years. However, Treswell Wood's long-term monitoring is well on the way to that mark, and we utilised 37 years' worth of this data in a paper published this month in the BOU journal *Ibis*.

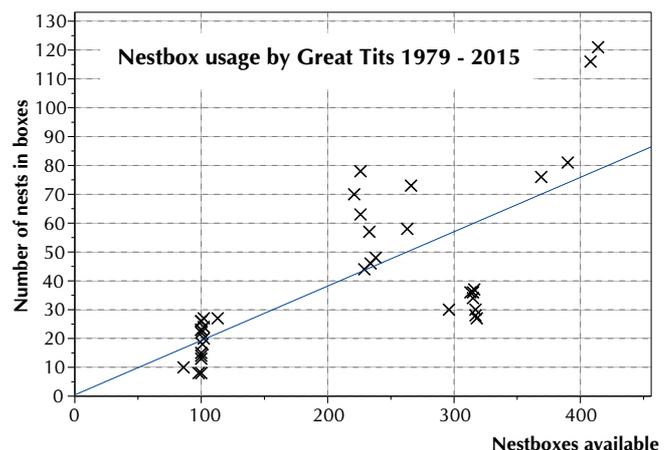
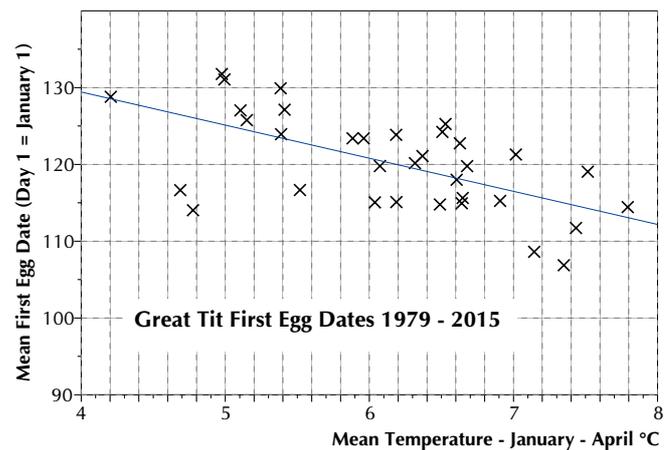
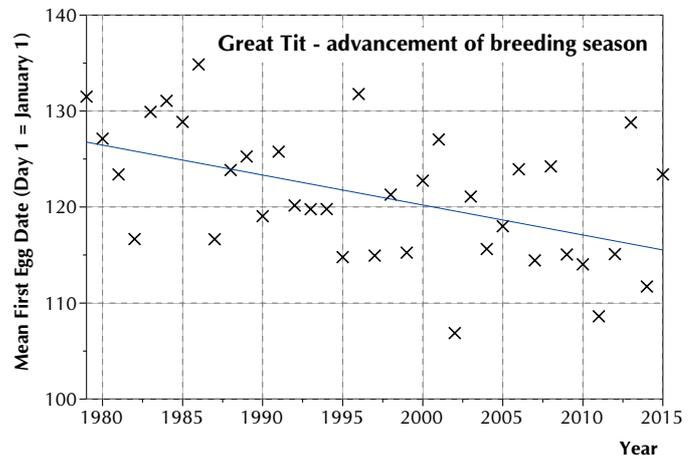
In this paper we used the records of first clutches in nestboxes in the wood. We examined how Great Tit breeding success has varied with both the changing climate over these past decades, and with differences in the number of nestboxes provided. Effects of climate change have been frequently examined in species including the Great Tit, with resident species in particular successfully advancing their breeding phenology in warmer springs in order to match advances in prey phenology. Similarly, differences in nestbox provision rate are known to affect the density of breeding tits, but there is no real concept of how many nestboxes is too many, or if indeed this is particularly important in the grand scheme of things.

We examined how two climatic variables (temperature and rainfall) and two measures of breeding density (number of nestboxes and number of fledglings from the previous year) affected four breeding parameters (first egg date (laydate), clutch size, hatching success (from total eggs laid) and fledging success (from total eggs hatched)).

We found that only spring temperature was a key predictor of changes in laydate, with first egg date advancing by approximately 11 days between 1979 and 2016. This change is very similar to the reported trends from other locations such as southern Sweden, Wytham Woods and the Netherlands. We did not find any other significant climatic effects on breeding parameters. While there were suggestions that fledging success may decline in the very wettest years, timing, as opposed to quantity, of precipitation is likely to be key. Rainfall during the critical period when young chicks require substantial amounts of food while also requiring brooding as they are unable to fully regulate their own temperature may be key, and we did not have rainfall data at this resolution.

All other breeding parameters significantly declined as the density of breeding Great Tits increased. Although in most years nestbox occupancy rates were approximately 25%, a greater number of accessible nestboxes resulted in a proportionate increase in the number of breeding attempts. Moving from 100 to 400 nestboxes (the minimum and maximum recorded) resulted in an approximate halving of both average clutch size and the number of eggs which hatched (in both cases from 8 to 4). Fledging success was much more variable across years, but increases in both density measures produced reductions in average fledging success. For nestboxes the change from 100 to 400 resulted in fledging success declining from approximately 75% to 30%. For productivity, a change from 100 to 200 fledglings in the previous year resulted in a decline from approximately 60% to 40% in the current year.

We also looked at the variation in these four breeding parameters (laydate, clutch size, hatching success and fledging success) across years. If climate change is driving adaptation to warmer conditions then we might expect variation in laydate to reduce in more recent times. We did not find this, and this is important as it shows that Great Tits are retaining flexibility in laydate. This means individuals have not evolved to breed earlier, rather they can still respond appropriately to spring temperatures in any given year. However, we did find that in years with higher breeding densities, both clutch size and hatching success (but not fledging success), were lower overall, but also more variable among individuals.



We also looked for interactions between climatic effects and nestbox (and hence breeding) density - for example, does having more breeding birds reduce fledging success in colder years? We did not find any. The fact that we found no interactions is a good thing as it suggests that nestbox provision can continue to be used to enhance or sustain populations adjusting to a changing climate. However, the negative impacts of over-provisioning of nestboxes mean it is important to understand whether, and by how much, increasing breeding densities in an area may affect fledging success and ongoing fledgling survival. This may well also vary by species and, for more generalist species, by habitat as well. Providing a surplus of breeding sites is a common management practice, but many species, including hole-nesters, are attracted to nest sites that are close to high numbers of breeding birds of their own and other species. So too many nestboxes may provide an ecological trap, encouraging birds to settle and breed at densities that lead to an overall decrease in productivity. This has been seen in species as varied as Goldeneye and Wood Warblers.

The journal was very positive about receiving and publishing the paper, and at all stages of the formal review process, the use of data collected by citizen scientists (and all the hard work it represents) and the long-term nature of the study was praised.

Footnote. Thomas is the leading author of this paper. An important co-author is Russell Barnett who did the initial work as part of his undergraduate dissertation.

We had not given Russell any clue about the difficult years (2003 to 2006) when large numbers of dormouse boxes were accessible to nesting tits. It was very reassuring when Russell's analysis of the data revealed exactly the same as we had experienced - excess boxes bring many problems. The modified boxes which the dormouse workers have developed and installed can resolve this problem to the benefit of birds and dormice alike (but we have seen this year how critical is the hole size).

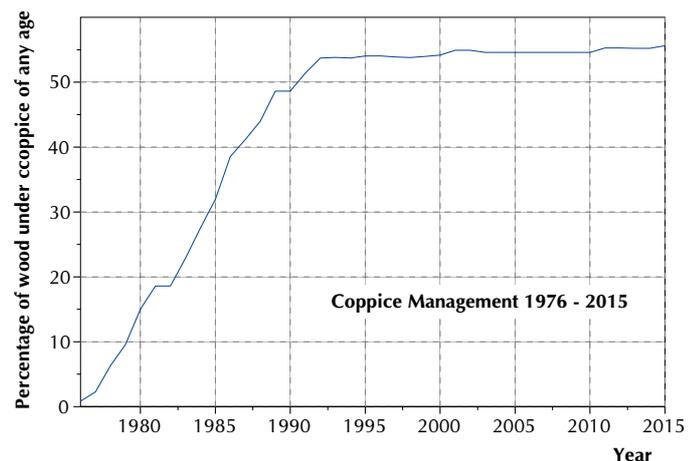
Similarly we had felt that the amount of rainfall on its own was not a major factor in nestling survival. What mattered was the timing of rain. Again it is good to see Russell highlighting this independently.

Analyses at Lincoln University

Over recent years, several students, at graduate and under-graduate levels, have used data from Treswell Wood in their dissertations. The notes below are from studies supervised by Charles Deeming and carried out by Mark Edwards, Natasha Gillingham, Chloe Cairns and Simon Fox. Thanks to all of them for their work.

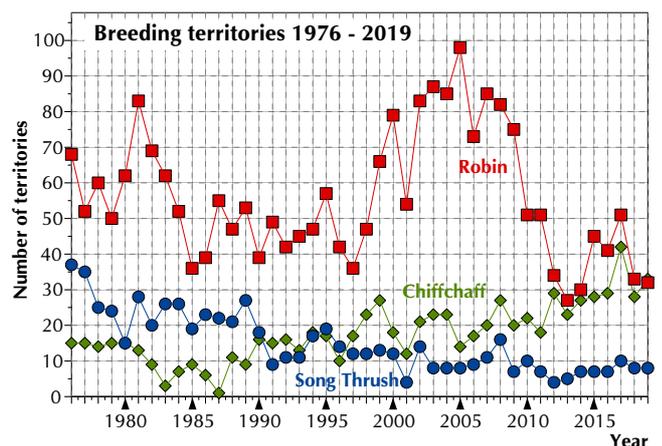
The projects here rely on the comprehensive records of bird breeding territories and coppice management rather than on the ringing or nest record data.

Student analysis has focussed on determining the size of individual territories for a range of years and examining the relationships between territory size and number, also investigating the effects of coppicing over time. Density-dependent impact on territory size is yet to be studied. The following reports look at the possible relationships with coppicing practice and bird breeding in a few of the more common species and also the overall diversity of breeding birds in the wood. In most previous analyses we have looked at coppice age of particular areas in the wood. These analyses consider birds in relation to total amount of woodland which is under coppice management whatever the age of that coppice. The graph illustrates the growth of the area under coppice over the years.



Changes in territory numbers in relation to coppice management for individual species

There are four patterns demonstrated by species when territory count is plotted against year. First, populations can fluctuate from year to year but there is no real trend with time. Blackbird and Robin are two such species. Second, for some species, such as Blue Tit, the number of territories have increased with time until the mid 1990s and then declined. Blue Tits also showed no significant relationship with coppiced area. The third pattern is overall increase in territories with time. Great Tit and Chiffchaff are two such species and both are significantly correlated with coppiced area. By contrast, the fourth pattern is overall decrease. Song Thrush, Willow Warbler and Dunnock are four such species. Typical patterns are illustrated here.



Diversity of birds breeding in Treswell wood

The CBC territory maps allowed for an assessment of breeding birds within the wood. The numbers of territories for each species for each year were used to calculate measures of biodiversity and species richness (the number of species recorded). The Shannon-Weiner diversity index takes account of both the presence of species and the extent to which each species, including the rare ones, contributes to the total abundance. (Note that this is an index of diversity. A given index number on its own means very little. The use of the indices is in comparisons between habitats or, as here, between years.)

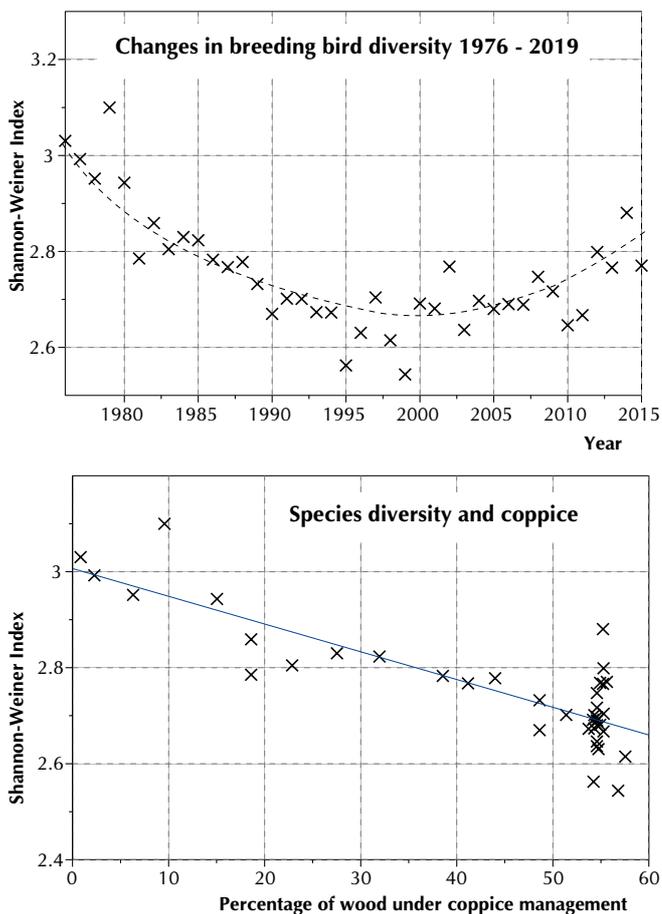
Over time species richness declined from just under 50 breeding bird species in the wood to around 35 species in the mid-1990s before recovering to around 40-42 species up to 2015. The pattern of diversity over time is similar with a general decline over 20 year up to 1995 and some recovery thereafter. The semi-natural woodland (southern third of the wood) had higher diversity for breeding birds than the northern two thirds dominated by ash. Analysis of the relationship between the proportion of the whole wood under coppice (irrespective of age) showed highly significant negative correlation suggesting that as the coppiced area increased, bird diversity decreased.

Relationship between time and abundance in Treswell Wood and at the national level

These analyses suggest that coppicing in Treswell Wood has varying impacts on different species, ranging from beneficial, through neutral to negative. The overall diversity of species has also declined during the period of coppicing but seems to have recovered slightly in the 20 years since coppicing reached a fairly steady state. Overall the picture appears slightly negative. This is in contrast to the findings of MacColl et al. (2014) where the mixed response was found but overall coppicing appeared to have beneficial effects on the woodland avifauna. Why the difference? The MacColl study analysed ringing data but used the CBC territory numbers to control for the variable annual populations. This meant, in effect, that capture rates in areas of different coppice age could be standardised according to local abundance. It is quite clear that the number of breeding territories cannot be used to standardise themselves - that would be circular in the extreme.

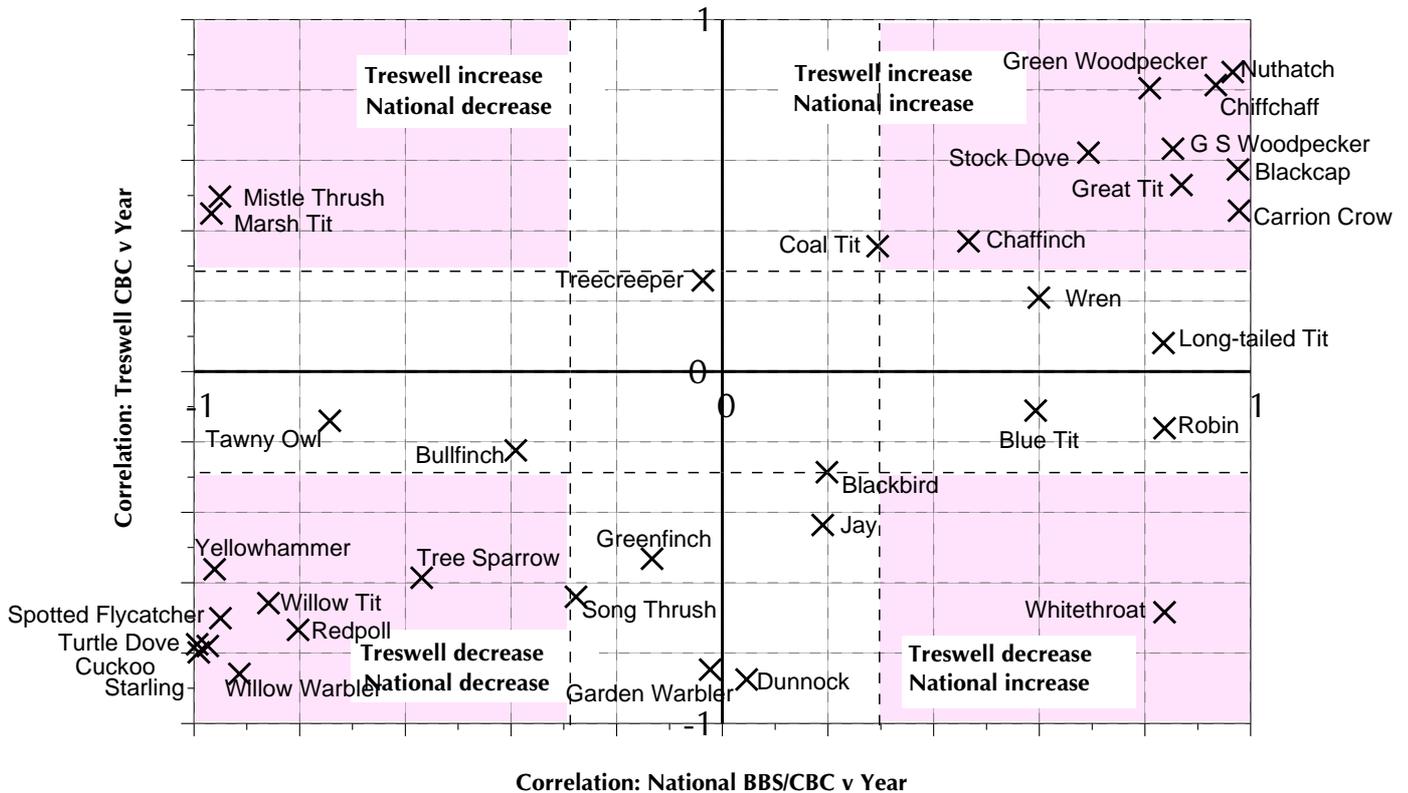
We were, of course, aware that some of our species have increased or decreased as have national populations of these species. Charles Deeming then wondered if, and how closely, the breeding territory numbers in the wood might be related to the national populations. The BTO BBS/CBC index of populations gives these details - national indices are available for all the years of the Treswell Wood study. Just as the woodland populations have changed, for better or worse, so have national populations. Two outstanding examples of changes in the wood are of Chiffchaff (which has increased steadily) and Song Thrush which has declined seriously. The national picture for these is similar. Analysis of the 35 most commonly recorded species in the wood between 1976 and 2019 showed that for 20 there was significant correlation between the Treswell territories and the national index with 11 more showing positive but not significant correlations. In only three cases were there significant negative correlations - Marsh Tit, Mistle Thrush and Whitethroat. We were already aware from ringing and nest recording that the wood's Marsh Tits were performing far better than the national picture would suggest. We are not sure why but it had prompted us to start looking for reasons. This analysis strengthens the motivation. The other two species came as a surprise.

If populations are increasing over time then there would be a positive correlation coefficient and a negative correlation coefficient if there was a decline over time. The diagram shows the correlation coefficients for the national population index plotted against the coefficients for the breeding territories record in the wood. Those species in the shaded area of the top right quadrant showed significant increases in populations both nationally and in the wood. Species in the shaded area of the bottom left quadrant showed significant decreases in populations in both sets of data. Some species, such as the Greenfinch are exhibiting a significant decrease in the wood but the positive value for the national figure is not significant, and the reverse is true for the Tawny Owl. However, three species exhibit different patterns in the wood from those seen nationally. Marsh Tits and Mistle Thrushes are doing well in the wood with significant increases in territory numbers over time but this is not reflected at the national level where populations are declining. The Whitethroat in Treswell Wood is bucking the national trend having



significantly declined. (We had already realised that the Marsh Tits in Treswell Wood were doing much better than they were nationally - this is excellent confirmation. We hope to discover more about the Marsh Tit once Amy's PIT tagging project can begin.)

Relationship between National and Treswell Wood Population Trends



Future analyses

Armed with the knowledge that the overall populations in Treswell Wood rise and fall in line with the national figures, we aim to reanalyse the data used in earlier studies and, of course adding subsequent years' data using the BBS/CBC index as an additional explanatory factor. Preliminary analyses look promising but the overall message is that external factors can have a major impact on local populations and these factors need to be taken into consideration when examining local changes.

Nestbox design

After the failure of the experimental box for Treecreepers proposed by Dave Francis we have tried another design - a small box with an entrance at the back of the base - similar to that of a bat box. We have also built some tall, narrow boxes and mounted them low down for Marsh Tits which are reputed to prefer such shapes and positions of nesting sites. Success this year is (as so often) zero.

On the other hand, the narrowing of dormouse box entrance to give only a 13mm slit entrance is an almost unqualified success. Winter plugging of these boxes is no longer needed. We have realised that the entrance width is critical. We also realised that wooden strips used to reduce the larger hole entrance are very easy for birds or rodents to attack so enlarging the entrance size. Metal strips are essential to exclude the birds.

The thoughts of Chairman John

Over the years, John McMeeking posed very many questions about the birds in the wood which he thought our data could throw light on. Some of these have been mentioned before in earlier issues of TWITTER in the section which we called *The Thoughts of Chairman John*, some have not. As the Treswell Wood data set increased in size, breadth and state of computerisation, John became increasingly concerned that the team's efforts over so many years should be put to as much productive use as possible. All John's suggestions we can find that have not been addressed are reproduced here in the hope that they may stimulate more use being made of our rich data set.

Breeding tits

Age of female and breeding parameters. There are enough Blue Tit nest records where the identity of the female is known to look at the effects of the age of the female on clutch size, first egg date, hatching success, fledging success, replacement clutches and, possibly, post-fledging survival of offspring. In addition some females have been found nesting in successive years - enough to allow investigations in these parameters in individual birds.

Winter survival. Does the proportion of Blue Tit nestlings which survive the winter bear any relationship to the age of the hen? Does experience in rearing birds compensate for any decline in nestling production with age?

Use of natural sites. Can we discover what proportion of tits nest in natural sites? If so, has this proportion changed with the number and distribution of nestboxes (including availability of dormouse boxes)?

Breeding Territory shifts (a suggestion from Dave Leech Head of BTO Ringing Scheme)

All other things being equal, birds tend to return to the same place to breed the next year. However, what happens if the habitat changes severely between one season and the next? Coppicing is one example of severe change. We have records of where tits nest and many records of adult birds caught in breeding condition. If the location of the nest site is the vital thing then we would expect movement from one year to the next to be much the same from year to year, irrespective of habitat change. On the other hand, if a severe habitat change forces them to move we would expect movement from one year to the next to be greater in a year after coppicing.

Territory boundaries and foraging for nesting material

Are territory boundaries ignored when birds are foraging for nest material? How can the territory owner know the intruder's intention is not food gathering? Are intruders secretive when gathering material. It would be interesting to see a map of territorial boundaries with nest material collection sites mapped onto it. (We have 10 years' worth of nest lining material data). Mike Hansell (National Nest Collection) was not aware of any studies into this.

The feeders

Blue Tit nestlings caught at the feeder. Is a higher proportion of birds from the north of the wood than from the south caught at the feeder. If so, what does it mean?

Use of feeders in the breeding season. Do tits which have territories (or mist-netted in breeding condition) further away make less use of the feeders?

How big is the 'feeder effect'? How far from a bird feeder must a mist net be placed in order to be able to regard it as an 'ordinary' net rather than one attracting birds to an artificial food source?. Both capture rates and species composition may be factors to investigate.

Ringing techniques

Effects of ringing on the birds. If processing has a harmful effect, then those birds that are handled twice or more in a day (i.e. SDRs) should have a lower survival rate than once only processed birds.

Trapping effort. We could, without too much difficulty, assemble a table of numbers of ringers active in any given year. How much, if at all, does change in manpower affect numbers captured?

Playback calls. Has our increased use of playback calls (which we never use near standard sites) affected standard site captures?

Population changes

Song Thrushes - our classic migrant bird. We know that catches of Song Thrushes have dropped drastically. Has the within-year pattern of captures and recaptures changed from the 'good old days' (pre-1990s)?

Sparrowhawks. Can we detect any changes at all that can be associated with the establishment of Sparrowhawk populations. These changes might be in numbers, biometrics, survival or anything else.

Great Spotted Woodpeckers. We know how much damage they can cause to nesting tits. Is overall tit nest failure related to Great Spotted Woodpecker populations?

Movements

Wren dispersal. We know juvenile Wrens move further within the wood than do adult Wrens, and that female adults move than males. But do female juveniles move more than male juveniles and do they have, like adults, lower survival rates than males? Have we enough captures of juveniles which we have later been able to sex to be able to find out?

Tree Sparrows capture rates. In the early 1980s Tree Sparrows nested in the north of the wood. Did captures rates in mist nets differ between north and south?

The Great Tit influx in spring. What proportion of our breeding population is locally bred, wintered here, bred in previous years, arrived in February etc.? Is the proportion of new birds at the feeders in early spring the same as the proportion in other nets at the same time? Is the apparent influx at the feeders simply a reflection of a very high demand for food at that time of year when natural food may be nearly exhausted and birds have to build up strength for the breeding season?

Long-tailed tits. BWP states that generally these birds remain in family groups although one study did find separate flocks of adults and juveniles. How do our birds behave? Is the behaviour the same from year to year?

Constant effort ringing & population estimation

Constant Effort and other captures. How do standard site captures compare with captures in other 'ordinary' nets? (ordinary excludes captures at ponds, feeders and where lures are used.)

Comparison between CBC territories and CES totals. In the first years with only a few years of non-standard netting, it was hard to detect relationships between mist-net captures and territory numbers. Lack of computerisation was also a problem. We have not looked at any overall relationship between the two seriously since then. Possibly the most instructive would be the species where the two set of figures showed the worst matches.

Patterns of recaptures

We often seem to catch relatively old Chaffinches with a long interval since the previous capture. Is the proportion of 'old' Chaffinches much higher than the proportion of 'old' birds in other species? Are these long gaps between captures more frequent with Chaffinches than with other species?

How does density of captures vary within the wood. It is simple to tabulate the total number of captures of each species in each grid square of the wood. It is also easy to assess the total capture effort in each square. Do different parts of the wood differ in capture patterns (bearing in mind potential effects of coppicing)?

Diversity on standard sites. How does species diversity vary between standard sites and between years. Is there any interaction between standard site and season?

Survival and productivity

Bullfinch productivity. The correlation between CBC trends and productivity seems non-existent. High juvenile:adult ratios with decreasing populations suggest adults dropping dead after successful breeding. Is there a more satisfactory explanation?

Predation

Nestbox predation. This varies massively between years but we have a record of nest failure through predation. What factors affect predation? Number of nestboxes? Compactness of breeding season? Number of nests? Great Spotted Woodpecker population? We have no record of any mammal populations but Tawny Owls might produce some proxy measure of them.

Biometrics

Blackbird biometrics

Our winter birds are probably different from the summer birds. Continental birds tend to be larger than British birds. We should expect different mean wing lengths in summer and winter (and of course there will be age and sex differences too).

Parasites and diseases

Avian Pox. We have records of several birds infected with avian pox, some of which we have subsequently recaptured with no symptoms. Do we have enough data to compare survival rates of infected birds with those of non-infected birds?

Harvest mite infestation of Dunnocks. In the 1980s we recorded infestation by harvest mites on various birds, most notably Dunnocks. We have never done any analysis to look at biometric data or survival in relation to mite infestation.

Feather Mites on Robins. Some analyses have been carried out by students from Nottingham but there has not been any investigation of mite infestation in relation to biometrics or survival nor any examination of individual birds to see if some individuals are generally more heavily infested than others.

Tree Sparrow nests. Tree Sparrow nest sanitation is apparently not good with droppings often left in the nest and a later clutch is then laid in the fouled nest (although often with a little more dried grass lining). Just before the next clutch is laid the birds usually bring fresh green material to the nest - sometimes only a small leaf or two. Species of plant used varies. We suppose the green material may be toxic to some nest parasites and now wonder if the droppings, far from being accidentally left, are deliberately left to release anti-parasite chemicals. Is it possible to analyse the chemical makeup of the nests of Tree Sparrows and compare it with that of, say, Blue Tits, which are scrupulous about nest sanitation even though only a single brooded?

Noteworthy Encounters

The range of interesting captures is noticeably narrower here because the only captures we have been able to make since publication of the previous issue are those recent captures of nesting adults and some from the first post-lockdown visit on May 24th. We had thought we would be too late to ring any nesting Tawny Owls but, sadly, this

year none have nested in the wood. On the positive side, the large nestboxes have remained free from Grey Squirrels and are now home to some pairs of Stock Doves.

Species	Age/sex	Ring	Date	Grid	
Marsh Tit	4F	Z782257	17/05/2020	P-1	On nest

This bird managed to squeeze its way into a dormouse box with worn and enlarged entrance, ignoring the purpose designed experimental boxes for its species a mere 50 metres away. Overall we have found five Marsh Tit nests in boxes. Marsh Tits are exceptionally tolerant of handling at the nest so we normally can catch just about all the box-nesting females. Not so this year - by the time we were able to inspect boxes this species, which nest just a few days earlier than Blue Tits, they were feeding young and not spending much time on the nest. It was just too late to catch all but one of the five nesting females - but she was certainly an interesting individual. She was ringed in 2016 as a juvenile and has been caught several times since then, always in the north-western part of the wood. She has been caught in breeding condition in both 2018 and 2019 although we did not find her in any nestbox. This supports our feeling that the species makes considerable use of natural sites. Maybe next year they may realise how good the experimental boxes can be.

Blue Tit	6F	ANA7135	14/05/2020	M01	On nest
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Adult tits caught on nestboxes often have pleasing track records. This one was ringed as part of the 2018 spring influx and soon found nesting in a box. In 2019 it was found nesting again in a box a mere 60 metres away and this year it is back in that same box - obviously a more desirable residence.

Blue Tit	5	ANE3166	14/05/2020	H01	Dead on nest
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A victim of the pressures of the breeding season. This was one of the spring influx of tits ringed in early March. It was found dead on a completed nest. The breeding season puts lot of pressure on birds and the weaker ones may succumb to adverse conditions. Possibly this one died during the very cold nights earlier in May.

Blue Tit	5F	AVC1983	14/05/2020	P-2	On nest
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One of only two of last year's nestling-ringed Blue Tits to be found nesting in the wood. Her natal dispersal distance is not far - a mere 250 metres. The other one, AVC1994, had travelled rather further - 450 metres. These distances may seem small but it has to be remembered that the largest movement we could record in the wood is no more than 1000 metres. Nationally, the median natal dispersion distance is only 2 km. With relatively little good Blue Tit breeding ground within 2 km of the wood, it is likely that most of our Blue Tits which survive to breed either remain in the wood or else move rather more than the national median distance.

Blue Tit	6F	Z782611	20/05/2020	J01	On nest
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Our oldest recorded nesting Blue Tit this year - ringed as a juvenile in December 2016. We have no record of her nesting in 2017 but over the 2017/18 winter she was found roosting in the same box regularly. She nested in it in 2018 and is now back, using the same box again.

Great Tit	6F	ANA7149	15/05/2020	C01	Dead on nest
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Like the Blue Tit above, this bird was found dead on the nest - reasons unknown other than not by predation. Happily her mate continued to feed the brood alone and, at the time of writing, all was going well in the one-parent family.

Great Tit	5F	L525243	21/05/2020	F-4	On nest
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This bird was ringed in Beckingham and noted in the previous issue of Twitter after first being captured in the wood in January. It obviously prefers Treswell Wood to Beckingham, having now secured a breeding territory in Crabtree Holt.

Nuthatch	4M	TT49223	24/05/2020	Q03	
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Always good to see this species close-up with its black eye stripe giving a bandit-like appearance. Even better when it has, like this, a long history - ringed in March 2016 and recaptured frequently until mid 2018. Strangely it was not encountered during the intervening two years since then.

Chaffinch	6F	Z782082	24/05/2020	Q03	
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A capture of the type of bird that reinforces the question about patterns of recaptures. This bird was ringed as a young bird in November 2015, not encountered in 2016, caught only once in each of 2017 and 2018 and not again until today.