

TWITTER

Treswell Wood - Information To Tell Every Recorder

May 2016 Treswell Wood IPM Group

(Integrated Population Monitoring)

Project leaders:

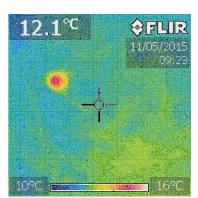
CBC

Pat Quinn-Catling

Nest Records Chris du Feu

Ringing John Clark

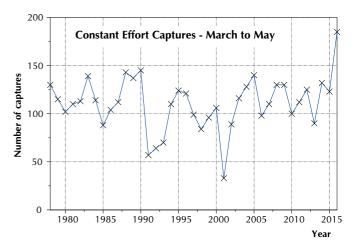
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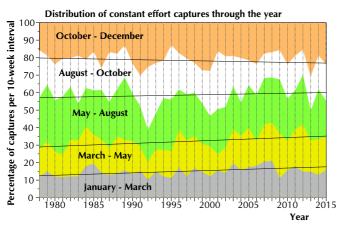
2016/2 Number 107

Unlike at the start if the year, the weather has not proved difficult during the last 10 weeks. The birds too have been very kind to us with larger numbers than usual being caught. The object of our ringing is not to catch as many birds as possible; it is to use the ringing data to understand the bird population in the wood. A visit in which we

catch no birds in the constant effort nets would not be a failure - it would show that the bird numbers were exceptionally low. However, it is more enjoyable when we have reasonable numbers of birds. From the point of view of our trainee ringers, it is important to gain as much experience as possible. With our present number of trainees it is useful to have more birds - so, yes, the birds have been kind recently. But how kind? Our 10-week constant effort captures have not only been the highest ever for the March-May interval since we began constant effort ringing in 1978, but the highest by a considerable margin. The previous totals range from 57 to 145 with a mean of 111. This interval we have had a total of 185 captures. We had the feeling that numbers were rather higher than usual. Such feeling are notoriously subjective



but in this case were well-founded. The biggest contributors have been Wrens - after an apparently good breeding season in 2015 and a winter without excessive cold; Dunnocks seem to be coming less uncommon than recently (although not yet in the numbers present in the old days of 'Dunnock City'); Robins are increasing again after a couple of thinner years and Blackcaps have returned in good numbers. There seem to be more Chaffinches and Bullfinches around. It looks like a general increase in numbers with a few species doing particularly well. (Note that the very low number in 2001 resulted from fewer visits being possible during the Foot & Mouth outbreak).



What does it all mean? The second graph shows the proportional balance of captures during our five capture periods through the year. Coloured bands show the proportions in each interval through the years and the straight lines show the long-term trends. The second interval does appear to be increasing slowly with time as its upper and lower trend lines do diverge. Conversely the lines for the last three intervals converge through the years. As the captures at this time of year are almost exclusively of adults, many of which are territory holders, it suggests that overall breeding numbers are, if anything, increasing slowly. The recent overall CBC numbers are consistent with this. Should we then expect the next two intervals to produce even

more juveniles and therefore not show a gentle long-term decline in proportion of captures? And here we must suggest a potential MSc. or PhD. student look in more detail, breaking down captures into adults and juveniles, resident birds, summer visitors, winter visitors and perhaps even separating juveniles before and after post-juvenile moult - the former category being more likely to be local products than the latter. Any offers?

We have had some interesting sightings of birds of prey - perhaps they are easier to see over the assart where the trees do not interfere with vision. On a CBC visit in the assart Keith saw an adult female Hen Harrier flying over.

She was going North to South - which seemed to him to be the wrong way if she was on migration. She was flying low and was obviously looking for prey on the assart. A few days earlier Olly's Dad had alerted us to a Marsh Harrier flying towards the assart, over the wood from the west. On 16th May we also noted a Hobby circling over the wood. And, of course, we have made the usual, frequent sightings of Kestrels, Buzzards and Sparrowhawks. May ended with a flypast by a Red Kite.

The nesting season seems very late this year - as late as those in the early 1980s. It also seems to be rather protracted with some clutches being laid in the same week as others are hatching. Dormouse boxes remain plugged over the winter and are opened once we think that no more tit nests will be started. This is to prevent the dormouse boxes from being used by the tits. It has worked very well this year with tits only using the bird boxes. Wrens, of course, are another matter and we expect them to invade some of the dormouse boxes for second and third broods, as they have done in the past few years. Good news from the dormouse team is that one dormouse was found in a box on the 'unplugging day'. It had managed to remove the cloth blocking the entrance before moving in.

With the start of the nesting season, we have set the frass traps again. Results from previous years have been combined with those from Ken Smith's other study plots. An analysis, with leading author Malcolm Burgess, has been submitted for publication: *Tritrophic phenological mismatch in time and space: no buffering for passerine birds*. The paper suggests that, with continued spring warming, temperate forest birds will become decreasingly synchronised with peak caterpillar abundance irrespective of geographical area.

Non-passerine Ageing and Sexing Guide

Ringers will be delighted to know that, at last, the rewritten non-passerine ageing and sexing guide by Jeff Baker is at the printer. We will have a copy with the ringing kit as soon as it is available. Pre-publication orders are £15 including P&P and available from the BTO shop - ISBN 978-1-908581-67-9. TWIG ringers should be particularly pleased with the Great Spotted Woodpecker description which has drawn heavily on our work - even though what we have done is to show that the species is often impossible to age after the post-juvenile moult. If you look at the standard work on European birds, BWP, you will see sample sizes for various biometric features of British birds are below 30. Our Treswell Wood sample includes data for 529 encounters with149 individuals. The recaptures, often spanning several moults, have enabled us to describe the 'known unknown' nature of ageing the species.

How long do birds live?

The EURING web site holds details of European longevity records at www.euring.org/data-and-codes/longevity-list. It gives details of the longest and second longest recapture histories of birds of each species amongst all European ringing schemes. While looking at it recently I noted that, although the longest Treecreeper record was held by a British bird, the second longest was given as a Czech bird. This is incorrect because our own 5Z1452, at 7 years and 273 days since ringing, gives a longer interval than the Czech bird. I have informed the curators of the longevity list and our bird will take its rightful place there shortly. It is worth looking at the list for interest if nothing else. Unfortunately at present, maintenance of the list depends on ringing schemes informing the curators of new records. (It might be thought that the list could be generated simply from the data held in the EURING Data Bank but it is far from a trivial problem to do this. Calculating time between ringing and recovery can be a bad estimate of longevity - consider the time interval calculated from a ring on a very long dead bird?)

Old Birds - more thoughts from John McMeeking

Chris has written above about challenging the EURING list of oldest birds on behalf of our champion Treecreeper 5Z1452. We all get a special thrill when handling birds which we recognise as being particularly old, even if only because they are living proof that ringing is no threat to their survival. But listing of oldest birds is not as easy as some might think, and both the BTO and EURING have problems in identifying oldest known survivors.

The simple 'time elapsed' between date of ringing and date of re-capture tells us only that the bird has survived for so many years, months and days, but little about its actual age. Only birds ringed in the nest as pulli can have a precisely known age: for all others age can only be an estimate based on an assumed fledging date. Among our passerines, we know that most of the first-year 3s will be dead within a year, and it is the 5s, in their first breeding season, which have to be correctly recorded to make accurate ageing of really old birds possible. The last traces of juvenile feathers are generally present for most of the post-breeding moult into adult plumage: once they have gone we shall be into 4s and 6s, and never know exactly how old the adult bird is. Many non-passerine species have more complicated sequences of moult over several years. But the same principal can apply: If you know the bird's age at ringing from the state of its plumage, you can work back to the estimated fledging date and calculate actual age from there.

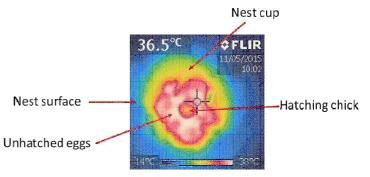
One such non-passerine is our old friend CT84206, a Great Spotted Woodpecker (see Noteworthy Encounters), captured for the 23rd time in April. It was originally caught on 21st July, 2005, as a juvenile, so we can estimate its fledging date as June 1st 2005 and know that it is now almost exactly 11 years old. The present British record-

holder, a Norwich bird, was ringed on 29th March, 2002, as a 5M and predated on 14th May, 2013, gave a survival of 11 years, 45 days. But it must have been at least 10 months old when ringed, and so approximately 12 years old when killed. Of course it is possible it was even older as we now know that ageing many birds as 5 (i.e. in their first spring) has been far from reliable. Once CT84206 reaches mid-summer 2017, we will be able to claim it to be the oldest ever known with certainty.

Thermal Imaging - Notes from Charles Deeming

At Riseholme (University of Lincoln) I have used infrared thermal imaging to investigate the temperature distribution of tit species sitting on nests. It seems that birds do not sit tight but rather they are 'leaking' heat from around their chest area, which could be causing convective heat loss from the nest. This may be important in how nests function.

A great new book by Tim Birkhead on eggs relates a story of a German researcher noticing that Goldcrests leaving nests had red legs, which were normal colour when they returned. This suggested that there was more blood flow in the legs and this might contribute to heating of eggs. I was interested in looking to see if Blue Tit legs were hot and used the IR camera on a visit to Treswell to record brood patch and leg temperature of birds lifted off the nest during the second week of incubation. It turns out



that the brood patch is very hot (as expected) but the legs are just warm. This suggests that the legs are warm from being in the nest rather than being hot by increased blood flow.

The thermal image camera also allowed me to show that hatching chicks are colder than the eggs - resulting from evaporative heat loss. Unsurprisingly a tree slug is indistinguishable from the background wood of the nestbox it was sheltering in. By contrast, the thorax of a hornet found exercising its wings in a box is clearly much warmer than the rest of its body, which is the same temperature as the environment.

(The image at the top of page 1 shows the thermal image of the hornet - the only warm spot is the circular blob which is the thorax. The image of the Tree Slug is, sadly, too monochromic to be of any value if reproduced here.)

Moult codes

In order to record the full picture of the timing of moult, it is important to start recording moult, or lack of it, before the moult season begins. Tits are usually the first of our birds to begin moult - typically those which have failed in their breeding attempts. Where possible, from now until late autumn, please record a moult code for each bird, even if that code is just O to indicate Old plumage and moult not yet started. Moult codes are listed on a card in the ringing kit (and, of course, are all in the Ringers' Manual). If circumstances permit it is also useful to record the moult state for each of the 10 primaries on one wing (or nine primaries in the case of finches and sparrows). Full moult details can also be recorded on the separate moult recording sheets if time allows.

Noteworthy Encounters

Species	Age/sex	Ring	Date	Grid
Tawny Owl	8	GR24214	28/4/2016	F04

After the last few years' dreadful lack of breeding Tawny Owls, this year shows a remarkable change - three nesting pairs. This bird is the only adult we have managed to catch so far, and it is one with a history. It was ringed in September 2014 as an adult, mist-netted in the north-east part of the wood. It was then netted again a year later in the far south of the wood - quite a distance for a sedentary species which needs to be very familiar with its hunting territory. The nest is in the southern part of the wood about five seconds flying time from the assart. We examined the nest when the first egg had just hatched and the larder held about 15 dead small mammals. Of interest was that the voles were bank voles rather than the more usual field voles. It looks as if the bird was hunting at the edge of the assart which is more suitable habitat for that species of vole, rather than inside the wood. This nest, like the other two, has managed to produce only one nestling with still another two or three weeks to go before (we hope) they fledge.

Oddly, after the visit when we saw the well-stocked larder we have not seen any more piles of small mammal corpses in any of the nests. It is as if the apparently abundant small mammal population has suddenly crashed. Adrian Blackburn, who monitors many Tawny Owl nests in North Nottinghamshire, says he has had the same experience. Well stocked larders early in the season have been empty on later visits with many owl chicks eaten by older siblings and with low growth rates in the few survivors. So it is not just the owls in Treswell Wood that are

suffering. There is a suggestion from at least two quarters that the sudden apparent drop in food availability resulted from a dry spell during which grass grew very little, denying rodents of an important source of nutrition. This led to failed breeding attempts and, because of their very rapid breeding cycle, a consequent lack of young rodents just a short time after the apparent abundant supply of rodents. We would welcome any comment on this matter from mammal specialists and would be happy to include such comments in the next issue of Twitter.

Great Spotted Woodpecker 4M CT84206 24/4/2016 Q03

Our oldest friend back again, sampling the delights of the relocated feeding station. This is it 23rd capture, always at feeding stations in the northern part of the wood, and it is 10 years 280 days since we ringed it. It is just over a year short of the British survival record and two years short of the European survival record for the species. What a pity that this bird cannot appreciate the contribution it has made to the revised non-passerine guide.

Dunnock 4 TR47580 20/3/2016 R-1

Dunnocks are highly sedentary and this one would seem to be typical for both its captures have been within 20 metres of each other in a constant effort net which is set there five times a year. Its previous capture, though, was in early 2014. It seems to have avoided capture on at least 10 occasions even though it is most likely that it has been present there all the time.

Robin 3J Z782382 15/5/2016 H04

The first juvenile of any species we have captured this year - always a memorable event. We knew it was time for it to happen as we had already found and ringed two broods of Robins (and that, in itself, is noteworthy) and both had fledged successfully by 10th May.

Blackcap 4M L731949 24/4/2016 N01

One of two Blackcaps we have retrapped with a history reaching back to 2013 when we ringed it in its first breeding season. We trapped it again in 2014 but not in 2015. All its capture positions have been within 50 metres of the main cross roads. It is typical of our returning Blackcaps to be found in the same part of the wood, year after year. So far this year we have caught 26 Blackcaps. Of these two were ringed in 2013 and one each in 2014 and 2015. The rest were new to the wood or had eluded us in the past.

Blackcap 5M Z588829 8/5/2016 P-1

Our first Blackcap this year with an out-of-wood documented history. Peter Cobb ringed it as a juvenile at Darlton in the summer of 2015. We have no idea of its natal site as it could have been reared in Darlton, in Treswell Wood or anywhere else. Darlton is only 6 km south of Treswell Wood but, of course, this bird has probably travelled hundreds of kilometres further south, and back again in between its two captures.

Willow Warbler 4M EYD710 17/4/2016 N00

This is the first time we have caught a Willow Warbler early in the season since 2012 and it is nearly 20 years since adults were regularly caught in the wood during the breeding season. Our few other more recent captures have been of individuals, usually juveniles, which appear to pass through the wood on their southward autumn movement. We originally thought this bird might have been passing through on its northward journey but now it appears not so. It was retrapped in the wood four weeks later. In addition, CBC surveyors have noted the species singing in the wood more often than in recent years.

Chiffchaff 6 EYD147 3/4/2016 J03

Of the 23 Chiffchaffs captured this year, this is the only one ringed in 2014 - although we did not see it in 2015. Three more were ringed last year and the other 19 are new to us this year. As with Blackcaps, so far it is proving to be a good season.

Goldcrest 5F EYD590 1/5/2016 D07

Although we have good numbers of Goldcrests wintering in the wood, breeding birds are rare. The last confirmed CBC territory was in 2004 although occasional birds have been heard singing in some years since then. A male Goldcrest had been singing much of the morning near our mist nets so appeared at least to be advertising for a mate. Late in the morning this bird appeared in the net - a female we had ringed late in March, so possibly a spring arrival rather than an over-wintering bird. Let us hope they both remain and breed successfully.

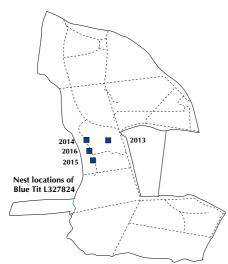
Goldcrest 4M HRT518 27/3/2016 O00 Control

This is the seventh Goldcrest movement recorded to or from the wood. It was ringed in October 2015 in North Somercotes, Lincolnshire. Our other incoming birds have been from Spurn Point (1981) and Finningley (1989). Movements from the wood were to Cottam Power Station (2006), Maryport, Cumbria (2000), Retford (1988) and Woodhouse, Sheffield (2015).

Blue Tit 4 D309591 24/4/2016 O04 Recovery

It is always worth looking at bird corpses to see if they are carrying a ring. This one was almost missed as the sexton beetles had nearly done their work and only parts of the bird remained above the surface. We had ringed the bird in the autumn of 2014 and retrapped five times since then. Cause of death impossible to know. Apologies to the sexton beetles who had, like Michael Finnegan, to begin agin.

Blue Tit 6F L327824 11/5/2016 J01



This bird was one of the very few unringed birds we find nesting in a box. That was in May 2013. She has nested in our boxes every year since then, never the same box but always within the same small area of the wood - as shown in the map of her nest locations. Each year so far she has had a successful brood rearing 7,9 and 7 juveniles respectively in the last three years. These are not particularly large broods but, perhaps, smaller broods put less stress on the female giving greater chances of survival to breed again. That has to be balanced against the high risks of sudden death by predation, cold or hunger. (If those risks were low, our Blue Tits would all breed like albatrosses, with one clutch of one egg every two years). Survival is one thing, but it is no use if the genes are not passed on. So what of her offspring? Of the previous broods we have retrapped 3/7, 1/9 and 0/7 respectively. The only one of her offspring known to survive over a year, L327590, was reared in 2013 and last retrapped on 8th May 2016 in the wood.

Great Tit 6F D309678 10/4/2016 J02 Recovery

This bird, ringed in the spring of 2015 as an incoming first year bird had nested that year in one of our boxes and been retrapped several times since then. It appeared to live around where it was found dead but was also a frequent commuter to the feeding station in the north of the wood. It was found dead, slightly injured, in a nestbox. It is not clear if it had been killed by a predator when it was inspecting the nestbox as a potential nesting site, or if it had been carried to the box which a predator was using as a larder, or if it had just died when it was in the box. The box was soon selected by another Great Tit and she has not fallen victim to any nest predator (yet).

Great Tit 6M Z782171 10/4/2016 Q03

In the last issue of Twitter we noted the apparent lack of pox in the wood. Murphy's Law! The metaphorical ink had barely dried on that issue when we captured this bird complete with avian pox - one lesion on the right cheek at the base of the bill. It was ringed in February and retrapped on March 27^{th} when it showed no sign at all of the pox. So, in a space of exactly two weeks a lesion, as big as a Great Tit eyeball, developed. We have not recaptured it since then but, with experience of some birds recovering, we will not be surprised to recapture it again in apparently healthy condition.

Great Tit 6M TJ49521 20/3/2016 Q03

What a fine capture history this bird has. We know its origin - ringed as a nestling in one of our nestboxes in 2009. It was retrapped several times during the following two years, twice in the winter of 2012/13 (the second time roosting in a nestbox) and then not seen since then until now - a gap of two and a half years. If we do not see a bird for such a length of time we would normally expect it to have died. Where has it been hiding? We just do not know.

House Sparrow 4M TT49158 8/5/2016 Q03

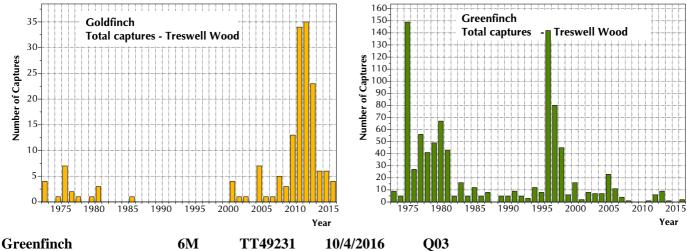
Since moving the feeding station just 25 metres or so eastwards and, consequently, nearer to the houses across the road from the wood edge, we have been catching more House Sparrows. This was one of four caught on the day. Whether the increase results from the relatively small movement towards the houses or whether it results from increased numbers of the species, we do not know. This bird was the prize - it had been ringed in January 2015 on the north edge of the wood, opposite the houses. This is the first House Sparrow we have retrapped in the wood since 1982. Let us hope it is the herald of more. Our total for the year so far is seven captures - the highest number captured in the wood since 1983.

Chaffinch 4M L731912 10/4/2016 003

Chaffinches are notorious for the long interval between one encounter and the next in Treswell Wood. This one demonstrates it well. It was ringed in March 2013 at the feeding station but has not been found anywhere between then and now. It is strange because it clearly knows about the feeding station - both captures have been there - and there have been very many occasions when we have set nets there since it was ringed. Does it live elsewhere and only pass through Treswell in the spring? Or is it particularly good at avoiding mist nets?

Goldfinch 4M Z782314 20/3/2016 O04

We are catching fewer of this species than in recent years - although these recent years have been rather more productive than before the turn of the century. We do see them in the wood very often, usually high in the tree tops well out of range of mist net capture. We no longer provide niger seed for them because they had already ceased to use it. This seems to be a common experience of many people in the area - Goldfinches shunning the niger which they had taken so readily and in such large numbers for a decade. Nationally the increase of the past 30 years seems to have halted. There is some suggestion that the species is now suffering from competition at garden feeders from Greenfinches which are starting to recover from the trichomonosis outbreak. However, with the low number of Greenfinches we catch in the wood it does not seem that there is any real competition here.



Like House Sparrows, Greenfinches used to be caught fairly frequently in the wood. Many of the captures in the 1970s were of birds in stubble fields at the edge of the wood or at pheasant feeding points within it. The numbers locally have dropped considerably because of trichomonosis, although numbers in the wood dropped for other, unknown, reasons well before that became a national problem. We seem to have lost this species as a breeding species within the wood. Apart from two birds in 2013, it is 20 years since we trapped any adults in breeding condition and a decade since any breeding territories were identified in the wood in the CBC.

10-Week Summary: 2016 Interval 2, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Wren	3	11		8	6		28
Dunnock	2	5		6	3	•	16
Robin	4	10	1	8	4	•	27
Blackbird	1	5		3	3		12
Song Thrush	1	2		1	1	•	5
Blackcap	14	5	•	4	1		24
Chiffchaff	7	•		3			10
Willow Warbler	1	•		1			2
Goldcrest		•		1	1		2
Long-tailed Tit	1	•		4		•	5
Marsh Tit		•		2			2
Blue Tit	1	3		4	5		13
Great Tit		2		4	5		11
Treecreeper		2		5	3		10
Chaffinch	1	7		3			11
Bullfinch		2		2	3		7
Totals	36	54	1	59	35		185

Treswell Wood Standard Site Totals in 10-week periods

Summary Data since standard site netting began in 1978:

Interval	1	2	3	4	5	Total
Maximum	128	185	288	253	1 <i>77</i>	864
Minimum	57	33	89	66	59	364
Mean	90	109	158	130	124	609