

# TWITTER

Treswell Wood - Information To Tell Every Recorder

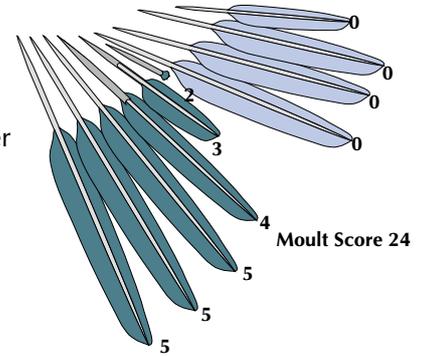
**August 2020 Treswell Wood IPM Group**  
(Integrated Population Monitoring)

**Project leaders:**

**CBC** Pat Quinn-Catling

**Nest Records** Chris du Feu

**Ringing** John Clark



**2020/3 Number 128**

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At the time of the issue of the previous edition of TWITTER, we were looking forward to a gradual increase in what we were able to do in the wood. The weather during lockdown was often warm, dry and calm with even the suggestion of forthcoming drought. Surely excellent conditions for nesting birds with a promise of good numbers of birds coming to drink at the ponds thereafter. The weather forecasts proved misleading and we were unable to operate on at least three Sundays because of high wind and/or rain. Conditions for the nesting tits deteriorated with cold and wet weather coupled with an apparent failure in the caterpillar crop. It was too late for us to collect frass this year so, instead on Ken Smith's advice, we tried to assess caterpillar damage on oak leaves. Happily the Marsh Tits did very well with five successful broods in nestboxes and more, we think, in natural sites in the wood.

The exchange of correspondence between us and Ken describes the situation:

**From us to Ken:**

*Our tits have not been doing well - small clutches and broods with very slow growth of chicks, several dying and thus not growing any more at all. Sexton Beetles doing OK.*

*I have not collected any leaf samples for you to look at but did take my telescope to the wood today in order to assess the leaf damage right up to the tree tops. I have to say it was very hard work to find any leaves at all of oak with any damage and ash seemed completely damage-free (as expected). However, John Clark and I did manage to find one leaf with some damage on it. I attach a picture. This is as bad as it gets. Even leaves like this were a rarity. I checked original oak leaves and some of the Lammas leaves (as they are known to people who know them by that name) and all were equally undamaged.*

*I hope this is useful. I think I can quantify the damage: <1% of leaves slightly damaged*

**Ken's reply.**

*Thanks for the image - I'm convinced! Our tits are doing very badly too - only managing to fledge 3-4 young at best. The only exceptions were our two broods of Marsh Tits which must have laid early and fledged their full clutches. It seems to be a double whammy with us - early caterpillar peak and not many caterpillars anyway.*

With these small numbers fledging we could not expect catches of juveniles at the feeding station to match those in a typical year - and they did not. Without any constant effort netting we cannot make the usual comparisons with other years. However by looking at the mean number of captures at the main feeding station at each visit we can see what has been going on. Captures at the main feeding station have been very low indeed with no sign of the large numbers of recently fledged Great Tits that we have seen for so many years. On some occasions we have captured more Marsh Tit juveniles than either Blue or Great Tit juveniles. It seemed dreadful. In fact, it was dreadful. The average number of captures per visit to the main feeders in June and July was just under half the average number to the feeders since we moved them to a new location in 2016. No need for a statistical test to tell us this year is very poor indeed. We have done some other mist netting in 'ordinary' places in the wood - that it not at a feeder, not at a pond, not on a standard site. Because our first visits were shorter than a normal standard site visit, on average a net used on one such visit would be comparable in catch effort to a typical 'extra' net set during a standard site visit. That gives an opportunity to compare capture rates. Much to our surprise, the capture rate this year in 'ordinary' nets in June and July (1.5 captures per net) was almost identical to the average rate in the same months in the years 2000 to 2019 inclusive (1.45 captures per net). A test of statistical significance gave a result so low that people might wonder whether the numbers had been contrived (which they were not). As we have seen before, our gut feeling was not supported by the facts. The contrast between normal captures elsewhere and low numbers at the feeders suggests that most birds have fared much as usual except for the tits which have done badly but tend to dominate captures at the feeding station.

To add to the poor season for tits, our post-lockdown return to the wood was too late to find the early Blackbird or Thrush nests we usually come across. Under normal circumstances we would have missed ringing Tawny Owl chicks as the species nests early. However when we did inspect the high boxes it was clear that no Tawny Owls had nested this year. We are not alone, though. Adrian Blackburn said that he had the worst ever season by a very long way for ringing Barn Owls in the area. He put this down to a lack of voles resulting from the very wet winter weather. Apart from the Marsh Tits, it is the Stock Doves which have performed well. They are still nesting, some now on their third clutches. Nesting success is higher than usual with almost no predation by grey squirrels. (This is odd because there was considerable squirrel predation in nestboxes in the south east part of the wood.) So far we have recorded 16 nests in 8 boxes. Of note was one nest which held three eggs. At first we considered it to be two fresh eggs and an old egg which had not hatched. But, no. Three hatched, grew and fledged successfully. This is the first time we have had a clutch of three eggs from the species. It is not unheard of elsewhere but a very rare event indeed. We have also managed to catch several adults on their nests. They seem to be as safe to handle at the nest as are Blue Tits. Pleasingly we have retrapped four nesting Stock Dove adults using the same nestboxes as in 2019. The other four adults caught were unringed and, sadly, we have not retrapped any of last year's nestling-ringed Stock Doves on a nest.

We had hoped to start PIT tagging Marsh Tits this season. Unfortunately the lockdown has delayed us in this. We want to use the system designed at Goldsmith University which looks more versatile and, crucially, less power-hungry than other system in use. All the parts except one are standard computer or electronic parts and easily available. The non-standard circuit boards for the equipment are still locked up at the closed university. If all goes well, this will be resolved when the new term begins and we do hope to have more to report in the next issue of TWITTER.

Easing covid restrictions mean that we are able to restart the standard site netting for the fourth interval of the year in August. Ringing will be different for the foreseeable future. Social distancing means we have an extra table to keep us apart, we each use separate ringing equipment, we come equipped with face masks and hand cleaning equipment. Sadly training ringers requires close contact and we cannot yet see a way of doing this in a covid-safe way. This means that trainees will have missed around a year of ringing. This is very concerning for our trainees and for the coherence and continuity of the group. More widely, as this situation will be much the same elsewhere, it must be of concern for the ringing scheme as a whole. (The BTO is, of course, taking steps to address this.)

On the bright side, Ellen has now been awarded her C permit. Congratulations to her and welcome to a productive ringing career.

## Events in Nestboxes - Treswell Wood, 2020

Species	Nests		Eggs laid	Birds			% Success Rate	
	Recorded	Successful		Adults caught on nests	Nestlings fledged	Nestlings recaptured (to Aug. 9 <sup>th</sup> )	Nests	Eggs
Stock Dove*	16	(7)	33	8	16	0	(70)	((75)
Coal Tit	1	1	10	0	10	0	100	100
Marsh Tit	5	5	34	1	33	1	100	97
Blue Tit	65	30	422	28	156	1	46	37
Great Tit	32	18	187	13	78	8	56	42
Wren	7	6	39	0	33	2	87	85
<b>Totals</b>	<b>126</b>	<b>67</b>	<b>725</b>	<b>42</b>	<b>326</b>	<b>12</b>	<b>53</b>	<b>45</b>
2019	125	77	939	67	473	25	62	50
2018	120	81	910	78	545	85	68	60
2017	105	75	747	38	416	45	71	56
2016	91	54	626	38	324	47	59	51
2015	102	59	633	41	283	33	58	45
2014	119	65	791	31	330	33	55	42
2013	80	51	484	26	314	76	64	65
2012	112	50	670	28	219	35	45	33
2011	111	62	796	32	310	29	56	39
2010	112	80	778	25	539	146	71	69
2009	118	54	648	26	300	38	46	46
2008	108	29	589	22	139	17	27	24
2007	129	64	922	52	313	35	50	34

The numbers of nests recorded, for all species, exclude nests which were abandoned before any eggs were laid.

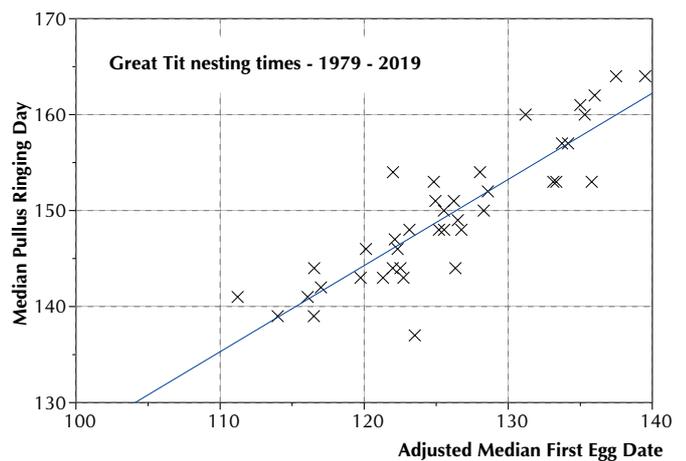
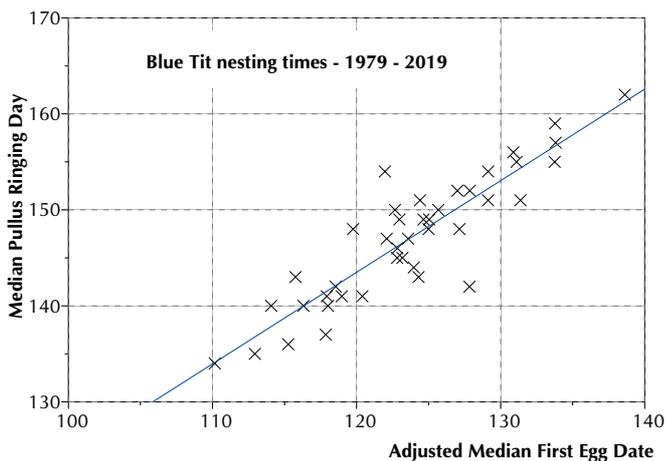
\* Some Stock Dove nests are still active.

## Timing of the nesting season

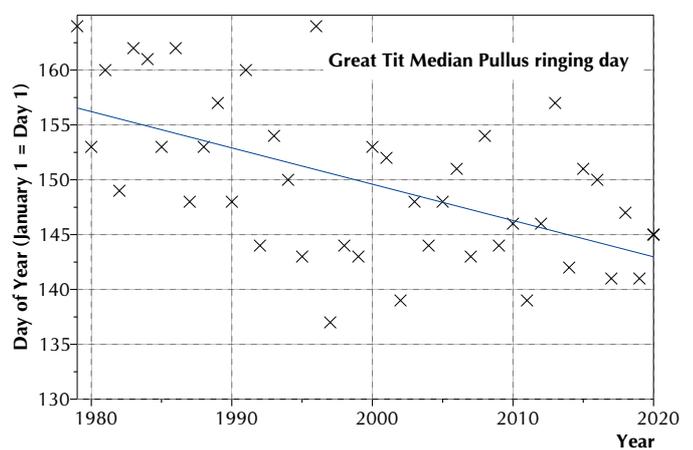
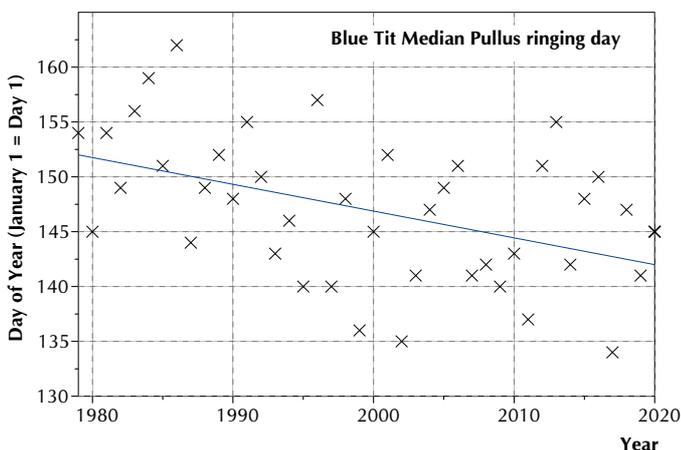
Because of the lockdown, we were unable to inspect nestboxes in the critical early stages of nesting with the result that we cannot calculate, with any certainty, the dates on which first eggs were laid in nests. This First Egg Date is the standard statistic for measuring the timing of the season. This is the first year since we installed nestboxes that we have not been able to record first egg dates. This is a pity because our long, unbroken series of laying dates has shown how the timing of the seasons has changed over the years. Our data have also been used in several pan-European studies. However, all is not lost. What we do have is the date of ringing nestlings. This obviously does have some relationship with the laying dates, but it is not an absolute relationship.

First, there is a window of about 5 days in which it is best to ring nestlings. This means we can delay or advance ringing a little according to other commitments such as work. Next, because eggs are laid at the rate of one a day, larger clutches will take a few days longer than smaller clutches before incubation begins, so delaying the ringing date. In years with poor food supply (such as this year) growth rates of nestlings may be slower again delaying the ringing. Weather also has effects in two ways. Generally cool, damp weather leads to slower growth rates. Days of very heavy rain often result in deaths of whole broods which are at a critical age - too small to keep themselves warm but large enough to have high food demands. Timing of outbreaks of heavy rain can thus destroy broods at a given stage, thereby affecting the average date of ringing nestlings.

The only one of these variables we can control for is the average clutch size - each additional egg will push forward the ringing date by 1 day. The two graphs below show the median day of ringing nestlings plotted against the 'adjusted' first egg date for all the years 1979 to 2019. The 'adjustment to the median first egg date is the addition of the mean clutch size for the year. This is, perhaps, rather a crude statistical model but, even so, there is a very convincing relationship between median pullus ringing date and first egg date. And that does give us a reliable comparison of the timing of the season in relation to other years.



After all that manipulation, the graphs for Blue Tits and Great Tits give these results. For both species the timing is two or three days later than the long-term trend. This is not surprising because of the poor spring weather. However given the very wide between-year variation and approximations made, what we see is a very typical year indeed.



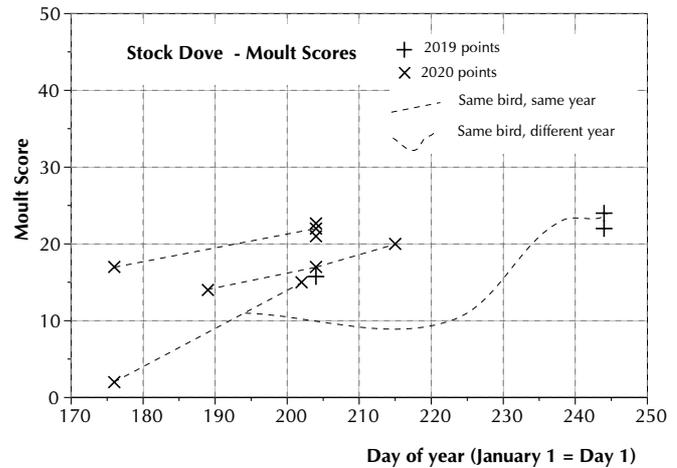
## Noteworthy Encounters

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

**Stock Dove**                      **4**                      **EY42344**                      **22/7/2020**                      **E00**

This is the third capture of this bird at this nestbox. The first capture was in September 2019 on a late (but not exceptionally late) brood. Like all the others of the species we have captured on nests this year, it was in moult. Because we have captured it on two successive broods this year we have a record of progress of moult in a single bird. This shows the rate of moult of an individual rather than just the timing of moult in that year of the species.

Information on moult is surprisingly hard to find. For some reason it does not seem to be available for many species on the BTO web site. There were insufficient records for the species to include a diagram showing the timing of moult in the BTO Mould Guide (definitely time for an update of that). Is this then a world first - a diagram showing successive moult scores of individual Stock Doves together with scores from the same bird in two successive years?

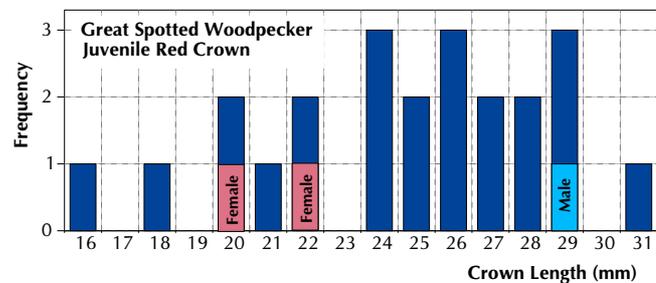


What do the scores mean? Each of the 10 primary feathers is given a score in the range 0 (old feather present) to 5 (new feather fully grown and sheath hardened). The Mould Score is the total of these 10 values. A bird that has not started moult has a score of 0 and when moult is completed the score will be 50.

What does it tell us? For these birds, this year, at this time of year a typical rate of moult score increase is about 1 per 5 days. If it continued at this rate they would take 8 months to complete moult or else, as some do, arrest moult at the end of autumn and restart the following year with two concurrent moult centres. It is likely, though, that the moult rate will increase once breeding is over with more resources then available for the costly business of growing feathers.

**Great Spotted Woodpecker 5M**                      **LK39036**                      **14/6/2020**                      **Q03**

A rare capture of a juvenile-ringed woodpecker on which we measured its red crown length. It is just the third of the 24 juveniles with measured crown length which we have recaptured as a sexable adult. It is male, the other two were female. Our conjecture is that males have much longer crowns than females and we hope, eventually, to be able to determine sex of the juvenile just by crown length. We are, of course, very sceptical about sexing based on any biometric and the limited data we have do not suggest a sharp dividing line between the sexes. It is, of course, possible not to assign sex to individuals in the overlap range or else to use a sharp cut off with the certainty of mis-sexing smallest males and largest females. As all ringers should be aware, either approach leads to biased data sets. So what is the point in our operation?



We wonder if the most useful feature may be whether the crown extends beyond the eye, or not. This is much the same as for sexing Goldfinches (although admittedly some individuals are tricky to determine). For the time we continue with the crown length measurement together with photographs of the individuals. With all that in mind, the three birds of now known sex are pointing in the right direction, as shown in the chart. Crown length could well be helpful in sexing juveniles.

**Great Spotted Woodpecker 3**                      **LK39106**                      **14/6/2020**                      **Q03**

The first post-lockdown woodpecker with a second juvenile caught three weeks later and one new adult. We commented earlier on the lack of old recaptures and suggested the wood had, for some reason, undergone an almost complete change of population of the species. Nothing here suggests anything different.

**Marsh Tit**                      **3J**                      **ANE3228**                      **7/7/2020**                      **Q03**

This is the first juvenile Marsh Tit we captured this year and one of, so far, four captured which were not ringed as nestlings in our nestboxes. Although we have recorded five successful nests in boxes, and given the sedentary nature of the species, it seems there are more pairs nesting in the wood in natural sites. These numbers are too

