

According to the Met. Office, February was the warmest on record, and also the fourth wettest in the last 189 years, with rainfall in the area nearly double the average. While we were lucky that Sundays were mainly dry, it has been the rain that has affected us the most with ditches and ponds full, and very muddy rides, making Nightingale Ride in particular very hard work. The pattern of catches has also felt unusual with standard site captures of only two and seven in February making it feel a very low catch for the period. However some earlier, larger than usual, captures gave us an above average total for the period.

In addition to the rain, there were three named storms in January. This brought down some trees in the wood and many branches and twigs. Mist netting cannot be carried out in windy conditions and this has added to the problem of scheduling visits to the wood.

Notes on the field sheets give a good picture of the problems:

managed to take advantage of a very narrow window when the wind was not too strong and it was not raining ... some more trees down in the wood from the very strong winds ... wood very wet still & a lot of small branches littering the ground ... very muddy ... ditches full.

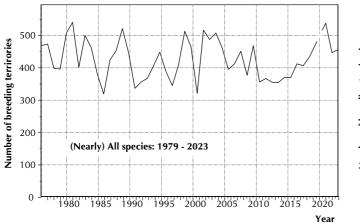
# **Common Birds Census - breeding territory mapping**

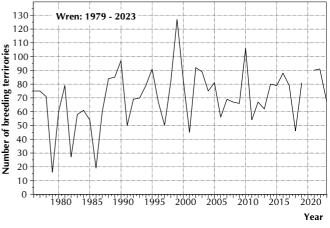
Thanks to all involved in the labour intensive process of producing the breeding territory numbers and maps: Andy (Goold), George, Keith and Paul for the field work, Chris (Bennett) for transcribing the visit maps into species registration maps, Ellen for turning these species registration maps into territory maps and Steve for digitising the maps.

For various reason, since the covid outbreak (and probably not unconnected with it) we have not managed to be as prompt as previously in producing the results. However, things are back on track. Results for 2023 are here. Steve's old computer back in action, the 2022 maps are now in our archive and 2023 maps about to be digitised.

Thanks indeed to all involved in this half century of consistent territory mapping.

The 2023 results: overall almost exactly the same number of total territories as in 2022 and, for most species, territory numbers are also very similar. The total number of territories is above the long-term average and on a par with territory numbers in the very early years. Our mapping of some species has not been consistent - Pheasants and Woodpigeons have not always been counted. These have been excluded from the totals as have birds recorded only as 'passing flyovers'. Species which were present and showed some evidence of breeding behaviour but registrations were too sparse to confirm a territory have been counted as half a territory. You will notice the regrettable gap in 2020 resulting from the lockdown.





The striking differences between 2022 and 2023 include the increased number of Great Spotted Woodpecker and Chiffchaff territories but massive drop in Wren territories. This drop is probably of little consequence - Wren numbers are extremely volatile and, given a good breeding season, will bounce back. The graph of the long-term record of Wren territories shows just how volatile they are. It is worth noting the drop in 1980 which was caused by a very hard winter, the subsequent rapid recovery which was then halted by another severe (but not quite as severe) winter two years later. After the late 1980s there has not been another winter as severe and numbers have shown no long term trend coupled with much between-year variability. Willow Warblers maintain a toe hold. Surprisingly, in spite of a general decline in Chaffinch numbers, within the wood their territory numbers are slightly above those of 2022.

Treswell Wood CBC - Numbers of territories - 2023							
Species	2019	2021	2022	2023	Min.	Max.	Average
Sparrowhawk		1	1	Х	1	1	0.4
Buzzard	Х	3	1		1	3	0.2
Reg-legged Partridge		Х	Х		1	1	0
Grey Partridge		Х	Х		2	4	0.2
Pheasant	6	7	8	n/c	3	12	6.9
Woodcock		1	Х	1	1	3	0.8
Stock Dove	9	15	17	12	1	17	3.1
Woodpigeon	6	11	7	8	1	25	2.1
Cuckoo		•	Х		1	11	1.2
Tawny Owl	2	3	1	2	1	3	1.7
Green Woodpecker	2	3	2	4	1	4	1.0
Great Spotted Woodpecker	7	7	5	10	1	10	3.9
Skylark		Х	3	Х	0	5	0.8
Swallow		•	Х	Х	0	1	0.1
Wren	81	90	91	68	16	127	71.6
Dunnock	8	12	8	9	4	37	15.6
Robin	32	50	50	54	27	98	55.8
Blackbird	26	33	27	32	16	42	28.1
Song Thrush	10	14	18	21	3	33	14.3
Mistle Thrush	Х	2	1	1	1	7	1.2
Whitethroat		Х	1		1	11	1
Garden Warbler		Х	1	Х	1	24	6.7
Blackcap	37	37	22	24	8	38	22.4
Chiffchaff	33	47	29	49	1	49	19.4
Willow Warbler	10	1	2	3	1	54	15.6
Goldcrest	Х		1	Х	0	5	0.4
Long-tailed Tit	2	2	3	1	1	12	4.3
Marsh Tit	6	5	2	1	1	6	2.2
Coal Tit	3	3	2	2	1	11	4.2
Blue Tit	55	86	71	86	25	86	53.9
Great Tit	41	48	42	38	8	58	33.5
Nuthatch	8	16	14	12	1	16	2.7
Treecreeper	4	6	3	Х	1	7	3.1
Jay	2	5	4	•	1	6	2.2
Jackdaw	1	5	3	1	1	5	0.4
Carrion Crow	3	3	1	•	1	4	0.8
Chaffinch	44	31	21	26	21	62	39.2
Goldfinch	Х	1	Х	Х	1	2	0.3
Bullfinch	3	6	1	2	1	10	2.9
Yellowhammer	•	X	Х	•	1	4	0.5
Totals	442	554	463	467	319	554	444.5
<b>Notes:</b> X: seen but too few observations to determine any territory. No survey in 2020 because of Covid lockdown. Min., Max. and Average refer to all years from 1976 onwards.n/c not counted							

# **RAS - Retrapping Adults for Survival**

As usual, we have submitted our Robin capture data for inclusion in the BTO RAS monitoring project. Lee Barber, project manager at the BTO, writes:

Thank you very much for submitting your RAS results. I am glad the numbers of retraps increased again from the low of eight last year. It's not the dizzy heights of 30 last seen in 2017 but it is an improvement which should help get more accurate RAS survival trends.

The 2023 data will be analysed in the new year and the results will be published in the spring edition of LifeCycle,

### and on-line. The full suite of 2022 results are available to view online at: https://www.bto.org/ras-results.

Just a passing thought. A few winters ago there was a BTO pilot project to record post-juvenile moult in Blue Tits. One aim was to examine whether fuller post-juvenile moult was associated with higher survival. We now have a photographic record of many Robins showing the extent of this moult (as measured by the number of remaining old greater coverts). The photographs also reveal the size of buff tips (if any) on adult greater coverts. Would it be worth examining these in relation to survival (as measured by recapture history length)?

## Winter CES

The BTO began a winter ringing project during the covid restrictions. This involved the same sort of protocols as used in the summer CES except that feeding stations were allowed. From our comparisons of over 40 years of our winter standard site netting and netting at the feeding station in winter we knew that the species assemblages in the two situations were very different indeed. In the first two years of the BTO pilot we compared captures at the permanent feeding station with captures at a short run of nets with temporary feeders sited nearer the centre of the wood. We kept to the protocols very strictly. The result was that captures in both situations were remarkably similar. We decided to use the permanent feeders as our winter site for the BTO project. The benefits of this are that our system at the feeders is well practised, works smoothly and, in effect, gives us the potential for comparisons with 40 years before the BTO pilot project began. The downside is that we will be more restricted in when we can set nets at the feeders - only on the eight occasions specified in November to February.

We now have two years' data for absolutely standard winter captures at the feeders. The capture numbers are given in the table. Ringing this winter has been hampered by unfavourable weather and we managed only seven of the eight visits. The results are surprising. We had felt that captures at the feeding station were rather lower than usual and we were very right indeed. The average number of captures per visit in winter 2022/23 was 29.0 but in winter 2023/24 it was only 15.7 - that is only just over half the previous winter's capture rate. Also very surprising was the species breakdown. The difference between the two winters

Species	2022	2023
Blackbird	4	2
Blue Tit	80	56
Brambling	2	0
Chaffinch	21	0
Coal Tit	19	7
Dunnock	8	2
Goldcrest	2	0
Goldfinch	5	0
Great Tit	51	23
Great Spotted Woodpecker	3	1
House Sparrow	1	0
Long-tailed Tit	17	6
Marsh Tit	6	7
Nuthatch	5	2
Robin	6	3
Song Thrush	1	0
Treecreeper	1	0
Wren	0	1
Total	232	110

was far greater than the difference between the two trial sites within a previous winter.

What are the differences? Apart from Marsh Tits, all other species showed declines. Most striking was the complete absence of Chaffinches. Their CBC territory numbers for 2023 were on a par with recent years but the number of mist net captures lower. Chaffinches are likely to be affected by trichomonosis and also by non-fatal but fitness-reducing scaly-leg mite. We have not caught any in the wood at all since September 2023.

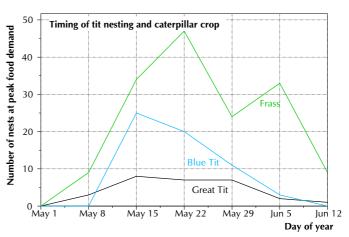
The aim of the BTO project is to discover what winter ringing can tell us about bird demographics. Producing tables of results is very easy. Interpretation is much more difficult. It would be easy to say that these dismally low capture numbers result from low bird populations and predict a gloomy future for our woodland avifauna. However, it could be that birds have adequate natural food in a fairly mild winter and have no need to resort to feeders. It could be that we do have low populations but that could mean that breeding success per pair will be higher because of reduced competition for food for nestlings. Standard site captures are a little above average overall which points to adequate natural food rather than low populations.

One suggestion was that winter CES could give some measure of juvenile winter die-off. Juveniles survive less well than adults so comparison of the proportions of juveniles in the first and second halves of winter would give a measure of this juvenile die-off. With 40 years of past data we looked at this and found the proportions of juveniles increased in the second half of winter. We rejected, of course, the idea of winter juvenile resurrection. A more convincing explanation is that in the second half of winter adults are more sedentary aiming to be near their former breeding site whereas inexperienced juveniles are roving more widely in search of a place to settle. This means many will pass through the wood on their travels, thereby increasing the proportion of juvenile individuals caught and playing merry hell with survival statistics. Analysis of winter CES is definitely something for the statistical brains at the BTO.

## Frass

Thanks as usual to Ken Smith for masterminding this operation and for the tedious work of separating frass from dross then weighing the frass.

The initial aim of project was to compare timing of frass and nestling food demand. This resulted in the paper *Tritrophic phenological match-mismatch in gapace and time. Nature - Ecology and Evolution https://doi.org/10.1038/s41559-018-0543-1* which showed there is, at present, sufficient plasticity in tit behaviour to cope with changes in timing of the caterpillar crop. The project developed into looking at how frass affects total productivity of tits.



The frass collection regime is now weekly rather than every five days. We cannot compare this year's total mass with previous years partly because of the change in regime and partly because we managed to operate only four of the six collection points. On the positive side, with weekly collections, in 2023 we managed to cover the whole of the frass season with the first week's collection producing no frass at all. The last collection coincided with the end of the tit nesting season. However we can look at timing this year. For once it seems that timing of peak demand of both tit species matches the frass production extremely well. That seems like good news. However, Ken also found that the total amount of frass (after adjusting for fewer collection points) was lower than usual. Alas a well timed season is balanced by a not very productive frass season. You win some, you lose some.

Ken has found that most of the other sites he is monitoring are showing evidence of cycles in the frass abundance but this has not really been the case yet in Treswell. The cycles are over about 12 years and he would have expected them to show up in our data by now. Perhaps it is something to do with the mix of ash and oak trees in the wood? Most of his other sites are oak dominated. Another point to think about is that Treswell Wood is coppiced. Does that affect cycles of frass production?

## **Noteworthy Captures**

Species	Age/Sex	Ring	Date	Grid
Sparrowhawk	<b>6</b> M	DT21907	7/1/2024	<b>R-1</b>

A good start to the year with a Sparrowhawk for the trainee. No blood from either and useful to catch one which is not a juvenile. In the early part of the year male Sparrowhawk captures outnumber females in a ratio of 3:1 but adults are outnumbered by juveniles in the ratio 1:2 adults.

## Marsh Tit 6 ANA7592 28/1/2024 F03

This is one of only four individual Marsh Tits caught this year of which three were first winter birds and this is our only adult. It was ringed in November 2018, before the PIT tagging project began. It was fitted with a tag at 09:50 on 10<sup>th</sup> April 2022 and gave its first tag reading under four hours later. It now has a history of 11 captures and 116 tag readings. Examination of its movement history is puzzling. Normally we find that Marsh Tits, once adult, remain strictly either in the north or the south of the wood with Norman's Ride (separating blocks F&G) being the demarcation line. This bird was tagged in the north of the wood - that being the first time in its history it was recorded in the north. It is possible it had strayed for some reason but it seems very unlikely because it was in breeding condition when tagged - and that is a time when they are usually most sedentary. The subsequent reading later in the day was in the south, as have been all its subsequent readings.

Over the years we have recorded only a very few adult Marsh Tits 'crossing the line'. Most of them have been found subsequently back on the 'right' side of the line. We have never recorded a movement across the line this rapid.

## Redwing 4 RF28831 21/1/2024 N06

After the larger-then-usual number of Redwings caught late last year and described in the previous issue of TWITTER, another batch of six appeared in our nets. These were near the north-east edge of the wood. As almost always, these birds were all unringed. Another five were caught on Nightingale Ride a week later. The previous issue gave the numbers of birds captured per calendar year. More biologically meaningful is the number caught per winter. The 18 birds caught so far gives our second highest winter total (since 1975/6 winter yielded 35 birds). This winter's catch represents 10% of the total number of Redwings we have ringed.

## **Blue Tit**

6

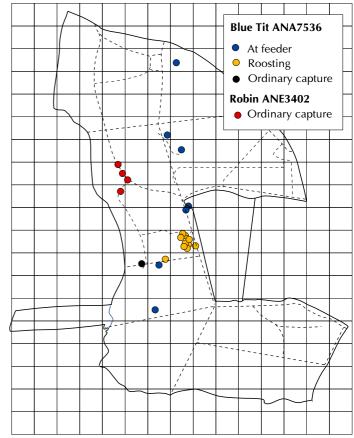
## 11/1/2024 I04Roosting

**ANA753** 

Our oldest retrap, of any species, of the year so far - 5 years and 3 months after ringing as a juvenile in 2018. It has been encountered 18 times, 10 of these when roosting. The map below shows where we have recorded it. Apart from its first two captures, all other captures have been at a bird feeder (temporary or permanent) or else roosting. Compare its overall range of movements with that of the much more sedentary Robin, ANE3402 And also the small range of roosting sites - a total of four boxes all but one within a circle of radius of 20 metres. The slightly more distant location was in its first autumn when it was still engaged in post-juvenile wanderings.

# Robin 6 ANE3402 14/1/2024 K00

Robins are very territorial and generally have a very small range of movement during both breeding season and winter. Females in particular can move a little way, perhaps as far as a nearby village, and set up a winter territory before returning to the breeding territory in the spring. What of this bird? We have captured it only in early autumn and winter in four successive years. None of these were breeding season captures so its sex remains unknown. However it has



always been captured within a circle of radius 30 metres. It seems likely to be a visiting wintering female holding her territory each year in the same place.

## Song Thrush 6 RX91285 28/1/2024

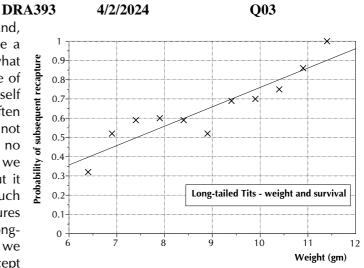
A retrap ringed in May 2022. This capture in winter and the previous one in the breeding season suggests it is a resident. RX91286 was ringed on the same day as a breeding female which was also retrapped today, all four captures being in the same run of nets. Do they have a long-standing pair bond?

4

**D08** 

## Long-tailed Tit

Very occasionally we suffer a ringing casualty and, sadly, this bird was one of them. When we do have a casualty we look into the circumstances to see what lessons can be learned in order to reduce the chance of re-occurrences. This bird was alone in a net (that in itself is not all that common as Long-tailed Tits very often move in small groups). It seemed lethargic and was not at all tangled in the net and was lifted out with no complications. It looked in weak condition so we warmed it (that works wonders with small birds) but it expired. Its post-mortem weight was only 6.5 g - much lower than its weight of 7.9gm on previous captures earlier in the winter. This prompted a look into Longtailed Tit weight and recapture histories. What do we find? We looked at all captures of Long-tailed Tits except



for same-day retraps. For each capture the weight was recorded and whether the bird ever had a subsequent recapture (i.e. was known to have survived to another day). This was a very coarse analysis - no account being taken of time of year nor the intervals between captures. However, the overall picture is very clear - the lighter the bird the less likely it is to survive in the wood to be caught at a later date. Returning to the late DRA393. It was very light - with only 1 weight in 200 being lower. Of these very light weights none were of juveniles which is where we would expect to see newly fledged birds which have not yet gained normal weight. It seems that these light adult birds are, indeed, the ones with short further life expectancies.

## Nuthatch 6M TY35411 7/1/2024 Q03

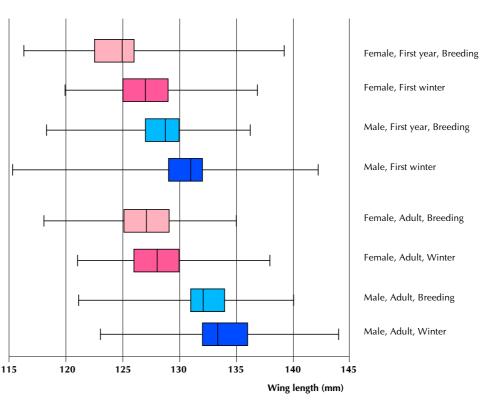
LK39358

Nuthatches are difficult to age once they have completed post-juvenile moult (and sometimes before that too). However, the new edition of Svensson includes more guidance on ageing and, following it, this bird was aged as an adult - which is correct as it had been ringed as a juvenile in 2022. The new guidance now allows us, at least sometimes, to separate adults from juveniles which have undergone a 'convincing' post-juvenile moult.

## **Blackbird 6M**

21/1/2024 M07

One of six Blackbirds caught on the day, all but one being newly ringed. One male had a largerthen-usual wing of 138mm but this one's wing measured 141mm. We have only caught Blackbirds with wings three longer than this. Just as it is unwise to assign sex of a bird based only on its wing length, it is also unwise to assign the origin of bird on its wing length. However, it seems most improbable that a bird with a wing this long can be other than anything of Scandinavian origin. In winter Blackbird numbers are augmented by longer-winged continental birds. The graph shows how the average wing length of Blackbirds in all age/sex classes is greater in winter  $\stackrel{|}{}_{115}$ (November-February) than in the breeding season when only



resident birds are present. (Compare adjacent boxes). The graph also shows the exceptional nature of a wing as long as 141 mm, the very wide spread of wing lengths in all age classes but the closeness of the middle half of wing lengths (boxes). We can also compare males (blue) and females (pink) in any age/season class and can also see, amongst other things, that adult wings are, on average, two or three millimetres longer than those of juveniles.

		New Birds			Recaptures		
	Adult	5	3	Adult	5	3	
Sparrowhawk	1						1
Coal Tit				1			1
Marsh Tit					1		1
Blue Tit		4		4	4		12
Great Tit		3		5	7		15
Long-tailed Tit	6			3			9
Goldcrest	5	2		2	3		12
Wren		1		1	2		4
Nuthatch	1			1			2
Treecreeper		3			1		4
Blackbird	5	6		2	1		14
Redwing	7	4					11
Song Thrush				2			2
Robin		2		2	4		8
Dunnock		2		3			5
Bullfinch		1					1
Totals	25	28		26	23	•	102

## 10-Week Summary: 2023 Interval 4, Captures in Standard Sites