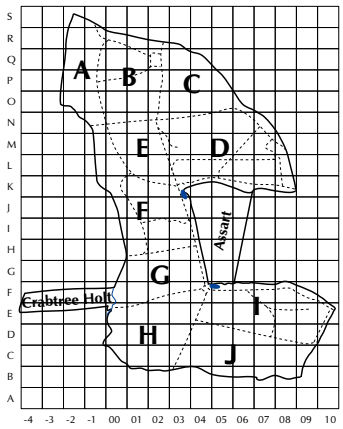


TWITTER

Treswell **W**ood - **I**nformation **T**o **T**ell **E**very **R**ecorder

December 2023 Treswell Wood IPM Group

(Integrated Population Monitoring)

Project leaders:

CBC	Ellen Marshall
Nest Records	Chris du Feu
Ringing	John Clark

2023/5
Number 145

www.treswellwoodipmg.org

The predominant feature of the autumn and early winter has been the weather. Notes on the field sheets have included: many small dead branches brought down by wind and rain; Nightingale Ride at its worst with a lot of water and mud; very wet with puddles on main ride; Piccadilly pond full; still very wet in wood with water across main ride in the 'Everglades' area. Weather, including snow, has prevented two mist-netting visits and not allowed us to carry out any evening visits to look for tits roosting in boxes. We did manage to carry out all the standard site visits this year but, frustratingly, the weather and people's availability in the last two weeks of December prevented us from doing the last scheduled BTO Winter CES visit of the year. One annoying thing is that birds can take food so soon after the feeders are filled but then seem to vanish.

During the autumn we have been visited by a Wildlife Trust children's group and a group of ramblers walking through the wood. All were pleased to see birds in the hand and hear something about ringing in the wood.

Our total number of encounters for the year, tabulated below, is about typical overall. The number of nestlings ringed (418) is well above the average of 341 and this compensates for fewer visits to the feeding station and missed visits towards the end of the year. However, perhaps the most meaningful information comes from our

Annual Summary - All ringing records 2023

	Ctrl.	New Birds			Retraps		PIT	Recvs.	Othr.	Total
		Adult	Juvnl	Pulli	Rt	SDR				
Sparrowhawk	.	1	.	.	.	.	.	.	.	1
Buzzard	.	1	.	.	.	.	.	.	.	1
Woodcock	.	1	.	.	.	.	.	.	.	1
Stock Dove	.	1	.	13	4	.	.	.	2	20
Tawny Owl	.	3	.	3	.	.	.	.	.	6
Great Spotted Woodpecker	.	2	3	.	6	1	.	.	.	12
Jay	.	.	.	.	1	.	.	.	.	1
Coal Tit	.	2	15	18	33	.	.	1	.	69
Marsh Tit	.	.	6	.	17	2	98	.	.	123
Blue Tit	.	56	73	264	269	17	14	2	18	713
Great Tit	.	29	54	117	198	35	7	1	3	444
Long-tailed Tit	.	17	.	.	16	1	.	.	.	34
Chiffchaff	.	23	8	.	4	3	.	.	.	38
Blackcap	.	25	12	.	3	5	.	.	.	45
Goldcrest	.	26	22	.	8	1	.	.	.	57
Wren	.	22	44	3	20	4	.	.	.	93
Nuthatch	.	8	1	.	17	1	.	.	.	27
Treecreeper	.	4	9	.	24	2	.	.	.	39
Blackbird	1	39	11	.	39	9	.	.	.	99
Redwing	.	2	.	.	.	.	.	.	.	2
Song Thrush	.	20	8	.	12	.	.	.	.	40
Mistle Thrush	.	2	.	.	.	.	.	.	.	2
Robin	.	23	52	.	30	8	.	.	.	113
House Sparrow	.	1	.	.	.	.	.	.	.	1
Dunnock	.	26	14	.	33	8	.	.	.	81
Chaffinch	.	14	4	.	7	1	.	.	.	26
Bullfinch	1	11	5	.	13	.	.	.	.	30
Greenfinch	.	.	.	.	1	.	.	.	.	1
Goldfinch	.	5	.	.	1	.	.	.	.	6
Totals	**2**	**364**	**341**	**418**	**756**	**98**	**119**	**4**	**24**	**2126**

standard site captures where our catch effort is the same from year to year. In the paragraph on the DEFRA State of Nature Report you will see that these captures bode well for the future.

Nest records – 2023

This year we completed 121 nest records which have been submitted to the BTO Nest Record Scheme. This scheme is the longest continuously running nest recording scheme in the world, beginning in 1939. We have submitted a total of 4,983 records to it since 1979 (that is for just over half the scheme's history). As usual we received a note of thanks from Lee Barber, the nest records officer – *Once more thank you for the records and please pass on my thanks to any others who have been involved in collecting them.*

Of course, if you happen to record nest events (open nests or box nests) elsewhere but do not take part in the BTO scheme, consider doing so. You do not have to be a ringer, nor ring nestlings in order to produce valuable nest records. *https://www.bto.org/our-science/projects/nest-record-scheme*

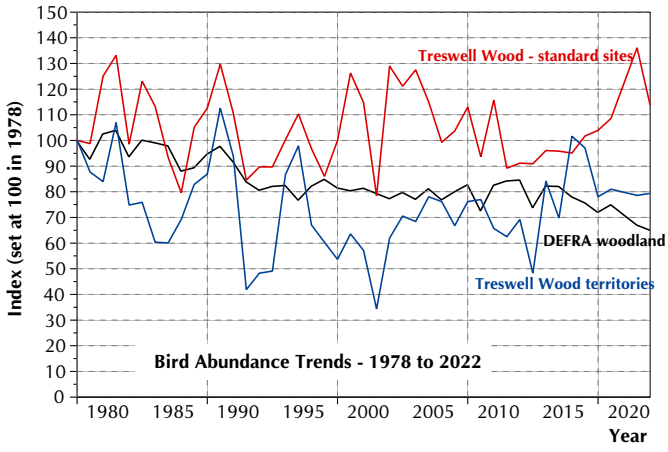
DEFRA State of Nature Report

DEFRA has released its State of Nature Report 2023. The bird sections rely heavily on various BTO survey data (of which our constant effort work plays its small part). The full report can be found at *https://stateofnature.org.uk/wp-content/uploads/2023/09/TP25999-State-of-Nature-main-report_2023_FULL-DOC-v12.pdf* The DEFRA data series runs from 1970 – a little before 1978 when we began our constant effort operation. Of particular relevance to us is the section on woodland birds. These include woodland specialists (e.g. Treecreepers) and woodland generalists (e.g. Dunnocks). Woodland includes all types – conifer, mixed and broadleaf, unmanaged and managed in a multitude of ways. Some woodland species which are included in the index are not seen in Treswell Wood (e.g. Capercaillie) but such species, being of restricted national distribution, will have very little affect on the overall index.

The results? Woodland birds are in decline with a 30% decline since 1970 and 18% in the last 10 years. The report also notes that *Changes in woodland structure following the loss of traditional management techniques have been identified as one of the drivers of population decline of specialist woodland birds.*

How does Treswell Wood compare with the overall picture? Perhaps we should note that there have been vast changes in the wood's structure since the Trust began managing it but the aim has always been to increase the diversity of the woodland habitats. Our constant effort ringing totals should have some relation to the breeding population of birds. Likewise the bird territories we map will make a useful comparison. We should, of course, recognise that results from a single site are bound to vary much more than the aggregated results from many sites. Second, we know from some of Charles Deeming's studies that one major driver of the populations in the wood is the population of birds in the surrounding area. Even if the wood was managed perfectly, and was free of damage by deer, our population trends would still be pushed towards local and national trends.

The graph shows three time series, all indexed to 100 in 1978.The DEFRA woodland index is shown in black with the consistent decline to 65. Our own breeding territory mapping, in blue, after considerable fluctuations seems to be settled at around 90% - somewhat higher than the national figure. Perhaps most surprising is the red line – that represents our standard site captures for Mid-March to Mid-August which will consist mainly of breeding adults. Although it has fluctuated over the years it has, if anything, increased in recent years with five successive years having an index over 100. Both the territory mapping and standard site netting suggest that, in spite of local and national events, the management of the wood is working for the better.

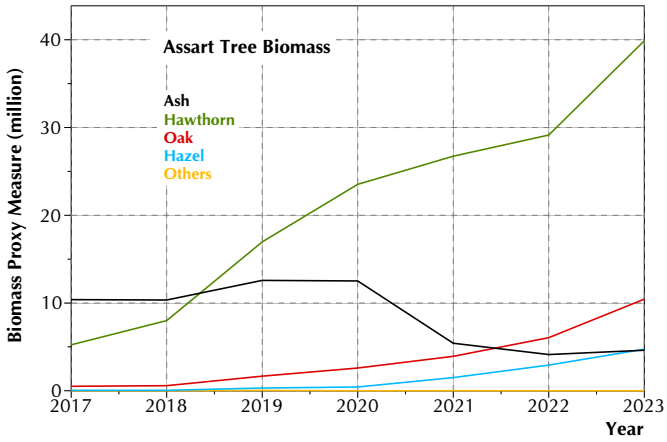


The Assart

For the eighth successive year we surveyed the tree growth in the assart. The survey consists of measuring the heights of all trees, from seedlings upwards, in about 100 quadrats of 4 m by 4 m. These quadrats are sited 10 metres apart in parallel East/West rows 20 metres apart. The quadrats cover a little under 10% of the total woodland area of the assart (about half of the assart is maintained as a meadow which is grazed or mowed each year and not part of this survey).

We had expected to find Ash continuing to decline in the face of ash dieback. We also expected there would be little new germination because ash seeds blown in from the woodland would be reduced in both number and

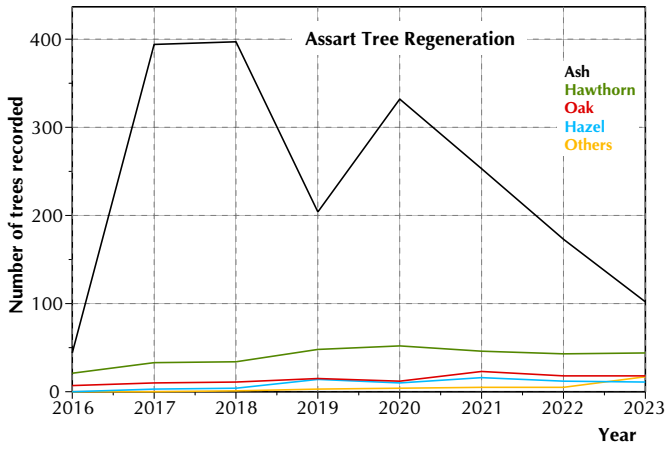
quality, again because of ash dieback. Our expectations were fully justified. The graph shows the biomass proxy measure for the species found (this measure is essentially an index proportional to the total biomass of the species in the assart). Other species are increasing in total biomass; only Ash is decreasing.



It is not easy to know the exact number of Ash trees which have germinated but, assuming that they grow at about 25cm a year, we have seen a minimum of 850 trees in the quadrats we sample. Of these only 102 survive and, of these only 29 are disease-free. However only two 5-year old trees appear to be disease-free and none of the trees are older than that. By the time trees are just three years old, 90% are diseased.

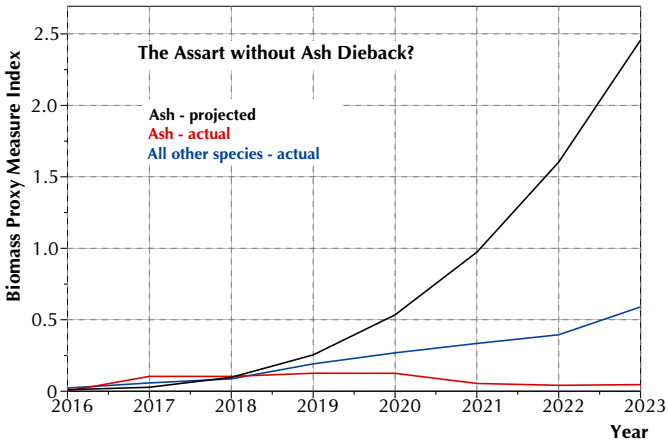
Scaling up from our 10% sample to the whole assart we expect something of the order of 10,000 Ash seeds to have germinated. In the whole assart we have found only one Ash older than five years which appears to be disease-free. It is now standing some 3 metres tall. This gives a mortality rate of well approach8ng 99.99% for seedlings. This is much, much higher than the rates typically suggested when the disease first arrived. The good news? First is that the assart, as a result of dieback, will not become ash monoculture. Second is that there will be a very small number trees which are resistant and their seeds are likely to result in resistant seedlings. Ash is a prolific seeder but these seeds will suffer competition from the established other species so will become a part of the woodland but not dominate it (we hope).

What of the other trees? Quite a surprise here. We had not expected to find (in the quadrats) so little new germination of other species. There was just one new Hawthorn in any of the quadrats, for example. We suspect three factors may explain this. The 2023 spring weather was far from typical with an early warm spell, followed by a long period of cold before warming again. As we suggested with Ash, the original seed bank in the assart may be exhausted. Perhaps most negative impact will be from the dense growth of various herbaceous plants – knapweed being particularly rampant. Trees already established are doing well, increasing in height and biomass. In a few places near the edge we have noted Oaks with their 'crowns' just a little higher than the surrounding brambles. A second, welcome surprise was to see, in addition to an abundant berry crop on the Hawthorns, some Blackthorns in fruit and at least one Oak was bearing an acorn. That Oak fruiting is surprisingly quick and very promising indeed.



Over the years we have recorded some other species which we have not found again - these include Birch, Field Maple and a Salix. The assart is criss-crossed by deer tracks and we see evidence of their browsing on the bark of some of the surviving trees. We suspect that the lost species, always low in number, have been selectively targeted by deer (Muntjac and Roe) to give variety in their diet.

In the light of continued growth of established trees and low germination, it is interesting to compare the numbers of trees found in the transects with the biomass. Only Blackthorn is increasing in numbers. With the combination of low germination and deer browsing, other species are not increasing.



It is perhaps worth considering what the assart might have been like in the absence of Ash dieback. With our records we can estimate the rates of growth and the numbers of seeds germinating each year and project these assuming the Ash grew as it does when not infected. These projections make many assumptions and do not allow for reduced growth of other species which could be outcompeted by Ash. However it is an informed guess. We would have had nearly 10 times as many Ash trees as we have, none of which were infected and the Ash biomass would be 50 times its present value. Under

that scenario, Ash would represent 80% of the woodland biomass, suppressing other species and thus reducing habitat diversity. As it is, Ash represents a mere 7% of the biomass.

The original assart plan, which has been followed, was to allow natural regeneration. A question to be pondered is whether fencing the assart to exclude deer would have been an unnatural intervention. On the other hand, it could be argued that the existence, and numbers, of the alien muntjac is itself an un-natural human intervention so fencing would have been appropriate. Whatever the conclusion, the picture we are building can be used to inform future natural regeneration projects.

Noteworthy Captures

Species **Age/Sex** **Ring** **Date** **Grid**

Sparrowhawk **5F** **EM32911** **5/11/2023** **O06**

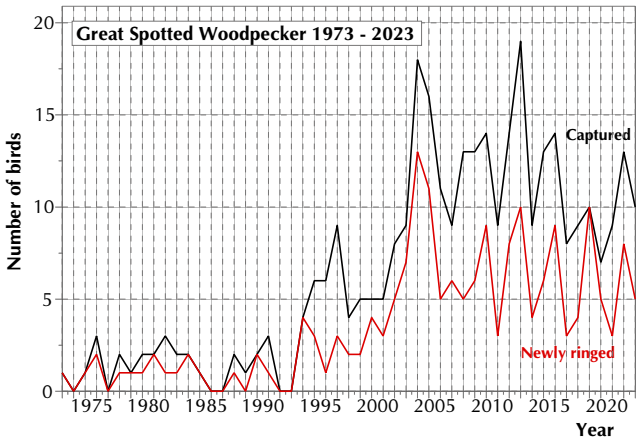
This is the first, and only, Sparrowhawk we caught in 2023 – although we now do see them very frequently We first saw them in the wood in 1978 and have recorded them every year since then, and caught them in nearly every year since. The table shows the breakdown by age and sex of the first encounters of the 78 Sparrowhawks we have ringed. Males predominate – we think it is because the females, being much larger, are less easily held in mist nets than the smaller males. There is a remarkable disparity between the ages at first captures between the two sexes. Adults are birds after their first breeding season, young birds the rest. Two thirds of the females were young whereas only around 40% of the males were. We presume there is a good reason for this but have no idea what it might be.

	Male	Female	Total
Adult	34	8	42
Young	20	13	36
Total	54	24	78

Great Spotted Woodpecker **3** **LK39348** **26/11/2023** **Q03**

This is the tenth individual Great Spotted Woodpecker we encountered in 2023. Five, including this one, have been new and the others recaptured birds from previous years. This, and the previous one ringed this autumn have been juveniles which have completed their post-juvenile moult. Unusually, both had retained sufficient old wing coverts to show they were, indeed, this year's birds. Most we encounter have moulted all their wing coverts making them indistinguishable from adults.

The graph shows the numbers of birds we have encountered in each year and the numbers ringed. Thus this year we show five new birds and a total of 10. Note that the five retrapped birds will appear in the ringing total for an earlier year and, for some longer-lived birds, will appear in the recapture totals for one or more years. In 2019 we encountered 10 birds all were new. It was a quarter of a century since we had not retrapped any birds from previous years.



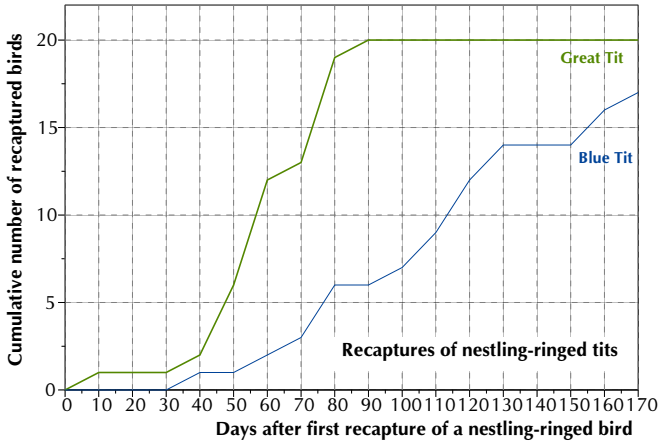
The graph shows the remarkable increase in woodpecker numbers beginning in the late 1980s. This coincided with the decline of the woodland Starling breeding population. It is well documented that Starlings often took over newly excavated woodpecker nests forcing the woodpeckers to excavate another cavity. Even if multiple-brooded Starlings did not usurp that second cavity too, it was too late in the breeding season for woodpeckers to produce very successful broods. With the Starlings no longer a problem, woodpeckers could reproduce far more successfully, as is demonstrated here in the wood. Good news for the woodpeckers. But no so good news for nesting tits – woodpecker predation can be a problem. In the case of Treswell Wood Willow Tits we know that the increased numbers of woodpeckers led to their demise. With up to 10 woodpecker breeding territories the four or five Willow Tit nests made in soft or rotting trees stood no chance.

Blue Tit **4** **ANA7536** **10/12/2023** **M02**

A well documented bird this is its 17th encounter ringed October 2018 (ringing details of which written by John McMeeking acting as scribe on his penultimate visit to the wood). Eight encounters have been when roosting, at least once in each winter since then and only found in a total of two nestboxes. It is nearly a year since its last capture. It was caught on a day with several recaptures of birds which also had not been seen for some time – two Great Tits and one Blue Tit with a two year gap, one each Great, Blue and Coal Tit with a one-year gap. Why such an unusual cluster of 'missing' birds? Who knows?

Blue Tit 3 ALY9706 15/10/2023 Q03

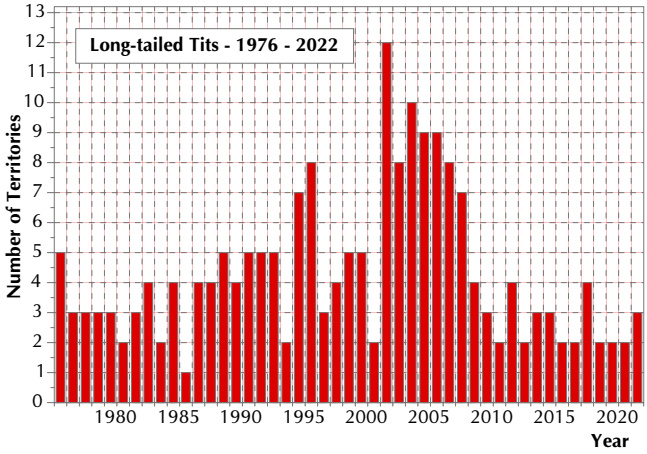
Another first time recapture of a nestling-ringed Blue Tit. This is the 17th out of the 264 ringed. This compares badly (as usual) with the Great Tit recapture rate of 20 out of 118. More interesting than the numbers are the recapture patterns – as shown in the graph. Great Tits are often caught soon after fledging but after mid-September most recaptures are of birds we have already recaptured at least once before. Blue Tits, on the other hand, are retrapped only in very small numbers until after mid-September when new first-time retraps appear more often.



The overall lower proportion of retrapped Blue Tits is likely to be partly because mortality is very high in the first weeks after fledging when birds have to learn to feed themselves and avoid predators – or else die. Were we to catch Blue Tits soon after fledging no doubt we would catch a higher proportion than we do now – but why they do not come to feeding stations as willingly as do Great Tits in the weeks after fledging, we do not know.

Long-tailed Tit 2 JTE894 12/11/2023 F03

This is the only previous-year retrap this autumn, all the other 15 individuals encountered in this time have been newly ringed. We have had the feeling that there are fewer Long-tailed Tits than usual. In fact we have ringed just two other birds this year and the year's total of 17 about half our long-term average of 33. Our overall capture rate is lower this year with 33 encounters (new and retrap) in total as opposed to the long-term average of 80. The long-term picture from the CBC also shows a recent decline after a peak 20 years ago. The number of territories we have seen in recent years is now lower than those in the early years of the Treswell Wood project.



Goldcrest 4M DRA276 5/11/2023 N06

This is one of 41 Goldcrests encountered during the autumn. This is the only one which we know from its ringing history that has survived at least one winter. It was ringed in the wood in mid-April so could have been a late-departing migrant. However it had not fattened to prepare for a northward journey so it is more likely to be one of our infrequent local breeders.

Treecreeper 4 JTE408 29/10/2023 D07

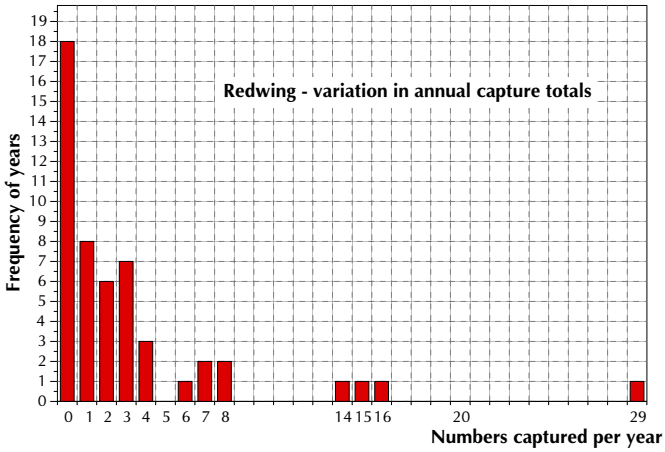
One of seven Treecreepers encountered in the last 3 months. Of these, three were adults ringed in 2022 or earlier and the others juveniles. This individual is the oldest at 4 years and 5 months since ringing in May 2019 as a first breeding season bird. It has always been captured in the same area – Nightingale Ride. We aim to photograph the primary coverts on the wing of Treecreepers in order to help improve the ageing technique. This bird has behaved well. We now have one photograph with it wearing its unmoulted juvenile coverts and three more in successive moults showing the adult pattern coverts. Happily in this case they do show that the adult coverts have smaller pale buff tips than do the juveniles. We now have over 450 images of Treecreeper greater coverts, all of birds of known age and many with pictures of the same bird in successive plumages. All we need now is someone skilled in analysis of digitised images.

Blackbird 4M LK39279 26/11/2023 N00

This bird was ringed on the corresponding visit a year previously and was caught in the same net at the same time of day – but not seen between these two captures. The fact that it had exactly the same weight on both occassions is probably little more than chance. It is known that some Blackbirds migrate between their breeding territory and the same winter site year after year. We wonder whether this is one which does that, following the same route each autumn and that route happens to include the west ride of Treswell Wood.

Redwing 4 RF28329 22/10/2023 M00

One of two Redwings captured this autumn bringing the total we have ringed to 163. Redwings are notorious vagrants making recaptures infrequent – we have only ever retrapped two of these birds. Their captures in the wood are sporadic. Often we catch none in a year, usually one or two but sometimes much larger numbers. These big catches probably result from a combination of factors – a very successful breeding season in Scandinavia, a good crab apple crop in the wood and less food elsewhere. Another factor in the clustering of captures is the behaviour of us, the ringers. Normally, once the constant effort nets are set, provided there are sufficient ringers, we will erect nets in other places. These are generally set opportunistically. If there is, say, a large crop of crab apples which are being investigated by thrushes, we may set nets there. The addition of a tape lure (and our wintering Redwings seem to be particularly attracted to the sound of Latvian Redwings) can augment the catch. Without these catches the standard site captures would give us, typically, annual totals of no more than four and, in most years, zero.



It is worth noting the importance of recording the circumstances of capture events – without knowing them we cannot determine whether the numbers of birds caught relate to the numbers of birds present rather than the effort of ringers.

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

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Sparrowhawk	.	1	.	.	.	.	1
Coal Tit	.	.	.	1	.	1	2
Marsh Tit	.	.	.	.	.	1	1
Blue Tit	.	.	8	2	.	4	14
Great Tit	.	.	1	5	.	5	11
Long-tailed Tit	11	.	.	2	.	.	13
Goldcrest	9	.	15	2	.	.	26
Wren	.	.	12	2	.	1	15
Nuthatch	1	.	.	.	.	.	1
Treecreeper	.	.	2	3	.	1	6
Blackbird	4	.	3	7	.	.	14
Redwing	1	.	.	.	.	.	1
Song Thrush	.	.	1	1	.	.	2
Robin	.	.	7	4	.	2	13
Dunnock	.	.	1	.	.	.	1
Totals	26	1	50	29	.	15	121

Treswell Wood Standard Site Totals in 10-week periods - Summary table

Summary Data since standard site netting began in 1978:

Interval	1	2	3	4	5	Total
Maximum	128	198	288	253	177	864
Minimum	57	33	89	66	59	364
Mean	92	115	159	130	126	611