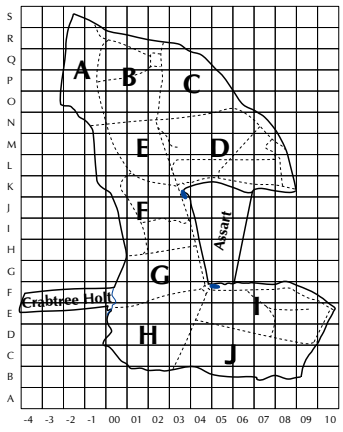


TWITTER

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

December 2022 Treswell Wood IPM Group

(Integrated Population Monitoring)

Project leaders:

CBC Ellen Marshall

Nest Records Chris du Feu

Ringing John Clark

All projects by permission of NWT

2022/5 Number 140

www.treswellwoodipmg.org

TWIG@50

On 17/12/1972 John McMeeking and Ted Cowley put up 7 mist nets near the Grove End entrance to the wood and caught 22 birds of 11 different species. This was the first ever ringing visit to Treswell Wood and was shortly after it had become an NWT reserve. In their wildest dreams they could not have imagined that on 18/12/2022, around 30 people would gather for the 2,654th ringing visit to the wood to celebrate a momentous occasion - the 50th anniversary of that first visit. Whilst there are quite a number of long running ringing sites around the UK, few reach 50 years. The ringing at Treswell Wood, combined with all the other many and various recording projects, has produced one of the most long-term and comprehensive datasets of the natural history of a single site in the world. And it is still growing.

Despite sub-zero temperatures, the long-established tradition of cake to mark significant moments of TWIG history was followed and was enthusiastically consumed by a wide range of people who have been and still are associated with TWIG's work: ringers old and new, CBC field recorders and map compilers, representatives from the dormouse project, NWT staff, members and supporters. There were notable absences, primarily Chris (du Feu) and his son Richard both of whom were defeated by a combination of train strikes and treacherous road conditions (though the former would have found the journey much easier had he not recently moved from Beckingham to Scotland).

I was involved in Treswell ringing in the early days having met John McMeeking in 1974 and, for about a decade after that, I was a very regular visitor. Work and family then took me elsewhere but the TWIG project has not looked back since.

Huge congratulations are due to everyone who has contributed in any way to the remarkable achievement that is TWIG@50 - here's looking forward to many more years of enjoyable and valuable recording.

Peter Kirmond

Thanks to Peter for his visit and report. The table below gives the numbers of captures on the first and 50th anniversary visits. It is interesting to note that during the first visit three Willow Tits were caught - a species we have not seen in the wood since 2016. On the other hand, we did catch a Marsh Tit this time. It is no surprise that there were no retraps on the first visit and since that visit we have always treasured retrap events.

As always, it has been an interesting year, culminating with the gathering in the wood to celebrate the Anniversary. This led to interviews on Notts TV and BBC Radio Nottingham, Blogs on the NWT website and an article in the Retford local paper. We started the year after the Covid worries of last Christmas, ended with the spectre of Avian Influenza, and have had a heat-wave in between. Meanwhile, we have been able to complete all our standard site visits after two partially interrupted years, and we have also completed last winter's CES, the BTO CES, and have started this winter's BTO Winter project ringing. At first sight the birds appear to have coped with all of this better than us, with an above-average productivity during the breeding season in the nestboxes, and better than average catches at the standard sites. The year's overall totals have been boosted by big catches at the feeders, and readings from the PIT tag readers.

Ash dieback continues its inexorable progress through the wood and is becoming obvious older trees. In addition to the well documented effect on the new growth in the assart, we will have a record of the effect on the wood with our bird surveys, ringing results and fixed point pictures.

Over the year the PIT tag readers have given us an insight into the use of feeders by the 15 tagged Marsh Tits. Of the 15, only 3 have not visited either of the readers. So far we have not been able to see any pattern to the visits, other than seeing that nearly all the Marsh tits use the feeders, some frequently - which we wanted to find out. One

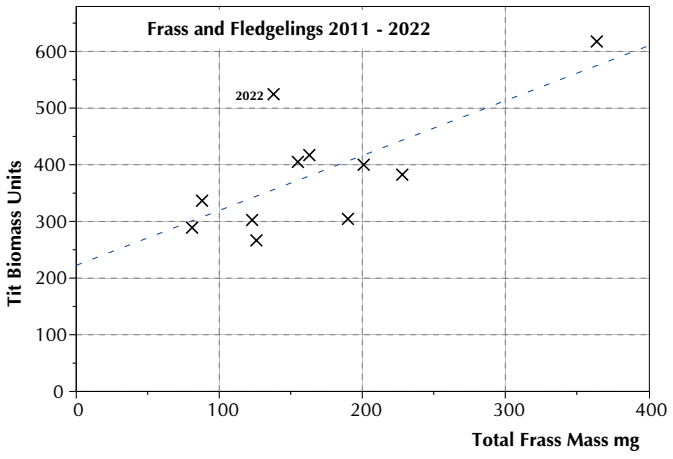
benefit of the readers is that they are always on duty, and we now have our first ever Christmas Day bird records.

Looking ahead, we have equipment and disinfectant to spray nets and to clean equipment to stop the spread of avian influenza. We have been pleased to welcome a new trainee, and eagerly await the challenge of year 51.

John Clark

	17/12/1972		18/12/2022	
Species - both visits	**New Birds**	**Recaptures**	**New Birds**	**Recaptures**
Coal Tit	3	.	1	5
Blue Tit	1	.	3	20
Great Tit	2	.	.	14
Goldcrest.	2	'	2	.
Wren	2	.	3	.
Blackbird	2	.	4	3
Robin	4	.	.	4
Species - 17/12/1972 only				
Jay	1	.	.	.
Willow Tit	3	.	.	.
Bullfinch	2	.	.	.
Species - 18/12/2022 only				
Marsh Tit	.	.	.	1
Long-tailed Tit	.	.	11	4
Redwing	.	.	1	.
Song Thrush	.	.	1	.
Dunnock	.	.	.	2
Chaffinch	.	.	4	1
Goldfinch	.	.	2	.
Totals	**22**	**.**	**32**	**54**

Frass 2022



Thanks again to Ken Smith for extracting and weighing the frass. As noted in previous issues, in addition to looking at the timing of the caterpillar crop in relation to that of tit nesting, we are looking at the total crop in relation to total tit productivity. This year's frass collection has been at seven, rather than five, day intervals. This is because a weekly collection fits in with our cycles of activity in the wood. We had found the five-day collections becoming too onerous, as indeed had Ken for his own site. The seven day collection, all other things being equal, is just as good for measuring total frass but not quite as good for looking at timing.

This year's results are shown in the graph with the 2022 point highlighted. As before we count the small tits as being worth 1 tit biomass unit and Great Tits, being half as heavy again, as 1.5 tit biomass units. The year was very productive overall for tits but the total frass mass not particularly great. However the long term picture is still the same - the bigger the caterpillar crop the greater the tit productivity

What we have not yet done, but could do easily, is to look at tit productivity in different parts of the wood. It is

divided roughly into thee sectors from north to south. There is almost no oak in the north and much more in the south. The three pairs of frass traps are sited in the north, central and south sectors and we now have enough years of data collection to look at productivity in these three sectors separately - and that is material for another project.

BTO Conference - The Witherby Lecture

The Witherby Lecture is a high spot of the annual BTO Conference. This year's lecture, by Professor Pete Marra, was no exception. A beneficial by product of virtual conferences, is that any-one can now watch it at *https://www.bto.org/sites/all/modules/civicrm/extern/url.php?u=4829&qid=801347*

The title is *Studying Birds in the context of the full annual cycle*. Pete asked what factors regulated populations and pointed out that cycles, whether they be daily or seasonal, are fundamental to ecological processes. He noted that research was heavily biased towards single-season ecological studies, usually of the breeding season. He suggested that this is because breeding is often seen as the important thing in bird ecology, that studies of the full annual cycle are logistically challenging and that there is poor understanding of migratory connectivity. Clearly (and it is abundantly obvious when you think about it) every part of the annual cycle will impact on other parts. So, for example, to understand breeding success you need to know the condition in which birds begin the process - and that will depend on winter conditions and (for Pete's study species, the American Redstart *Setophaga ruticilla*) migration. For such species which migrate from north to central America, throughout the year studies are, indeed, logistically challenging.

What has his study of a migratory species to do with the largely sedentary birds in Treswell Wood? The questions he posed are essentially the same for all species. Conditions during migration and in wintering grounds are substituted by autumn and winter conditions. To investigate these questions for more sedentary species, it would be useful to have a long-term data set, gathered systematically throughout the year which also could be linked to weather and habitat data. We need look no further than our own data to throw some light on these questions.

Is nesting time dependent on body condition (compare first egg dates with corrected body mass)?

Does body condition decline with increased density (not just in the breeding season)?

Which species are subject to density dependent population regulation?

Is there a relationship between condition and coppice age?

Do birds that winter in the wood have the same breeding success as those that leave the wood?

These questions look at effects of other parts of the annual cycle on the breeding success. But what about the other way round? How does breeding success impact on the subsequent moult? Or on over-winter survival?

Many more questions were suggested explicitly or implicitly his talk. Student research projects? Look no further. With the length of our data set we can look at many of these things at a species level but, for some species (particularly Blue Tits and Great Tits) we can examine them at an individual level too.

Noteworthy Encounters

Species	Age/sex	Ring	Date	Grid

Tawny Owl **9** **GM40962** **11/12/2022** **E00**

The first Tawny Owl since August 2021. Sadly none nested in our boxes this year. This lack of nesting is matched by the lack of sight/sound records with none being recorded in February, one in March and then none until July with a few more records since then. Hopefully we will have them nesting in 2023.

Green Woodpecker **3F** **DT21916** **11/12/2022** **E00**

As if a Tawny Owl was not enough excitement for one day, this woodpecker was attracted to our additional nets by a sound lure. It is only the seventh full-grown bird we have caught - but we have caught one in each of the last three years. Is that a good sign for the future?

Jay **4** **DT21915** **13/11/2022** **D04**

This is the fourth Jay capture this year - one retrap and the other three, including this one, new birds. Typically we will have two new and one retrapped Jay annually making the year just above average. Happily this bird contrived to be caught when some walkers were nearby giving us a chance to show its spectacular plumage and potentially dangerous sharp, strong bill. It was unusually well behaved and inflicted no more pain than a Blue Tit.

Blue Tit **4** **AXD9897** **30/11/2022** **E06 Roosting**

A very reliable user of nestboxes for roosting. We have found it in three successive winters, always in a box close to the north edge of compartment I. In addition it was found nesting in one of those boxes this spring. And ordinary mist-net captures, including at the nearby feeder sited principally to record PIT tagged birds? None at all.

Marsh Tit 3 AEZ3107 4/12/2022 M03

This is one of the PIT tagged birds, ringed in November and frequently recorded at the feeding station where it was first captured. This capture was at our trial BTO Winter CES site where we have temporary bird feeders, some 250 metres from the PIT tag reader. Of the 15 Marsh Tits we have tagged over the last 15 months only one has been recorded as visiting both readers - that was a juvenile still having not settled in either the north or south of the wood. Recaptures of the tagged individuals have always been fairly near the tag readers - the distance of 250 metres being about the furthest distance we have recorded. Compare this sedentary behaviour with that of the rambling Great Tit TV35693.

Marsh Tit 2 ANA7592 25/12/2022 E06

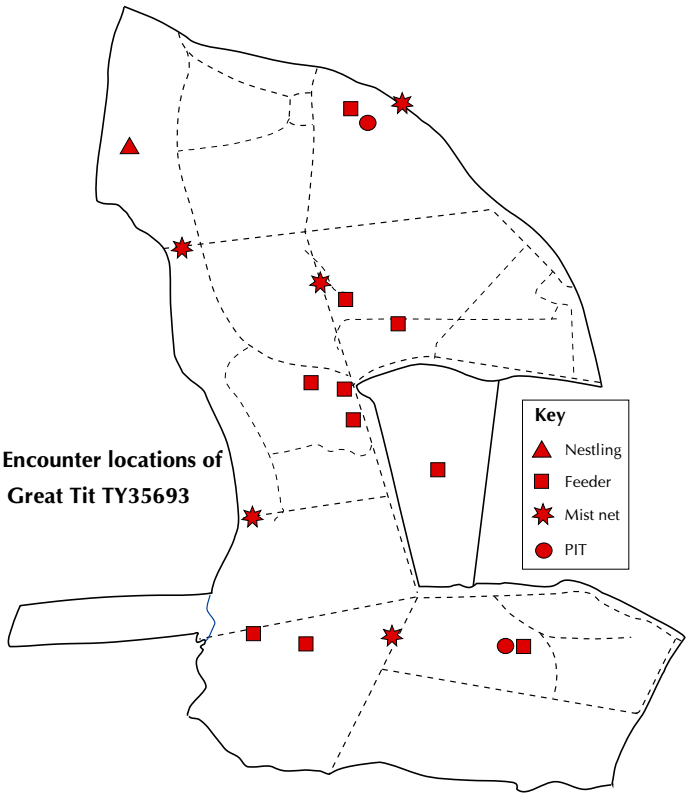
This is our first ever record on any Christmas Day. It was one of four birds, two Marsh Tits, one Blue Tit and the rambling Great Tit TV35693 (see below), recorded by the PIT tag reader in the south of the wood. This bird was ringed as a juvenile in 2018, PIT tagged in April 2022 and has now generated nearly 90 encounter records, 10 of which are mist-net captures, the rest tag readings.

Great Tit 4F NZ53424 18/12/2022 M03

This bird was ringed as a nestling in 2020 and retrapped twice in its juvenile plumage. It was retrapped later in the autumn after its post juvenile moult. Its new plumage was noted as being very pale indeed. It is one of our 'Grey Tits'. Since then it has undergone two full adult moults. In neither of this year's captures did we note any paleness in its plumage. The timing of these events is similar to another Great Tit, ANE3231, which was in pale plumage in autumn 2020 but this year has normally coloured plumage. Again this points to environmental conditions at moult time (shortage of carotene) rather than a genetic factor leading to the pale plumage. Thinking again about Pete Marra's lecture we wonder how might these conditions at moulting time, affecting the plumage as they did, have affected birds' chances of attracting good quality mates during the subsequent breeding season?

Great Tit 4F TV35693 20/11/2022 M03

This was one of our 'proof of concept' birds when we began the PIT tagging. It already had a recapture history of well over four years and a record of widespread movement throughout the wood when we put on the PIT tag in November 2021. It very rapidly showed that the system did work and it was a frequent visitor to the tag reading feeding station. Once the second station was sited in the south of the wood, it appeared there too. It has now given more PIT tag readings than any other individual - 1,769 registrations on 117 separate days (in addition to its 25 captures in mist nets since being ringed as a nestling in 2017). This bird seems exceptionally good at finding temporary feeding stations which may well be related to its wide ranging behaviour which made us select it as a proof of concept bird. This behaviour may well be related to its longevity. If it knows the wood well it will know where food and shelter may be found better than birds which are not so mobile.



Encounter locations of Great Tit TY35693

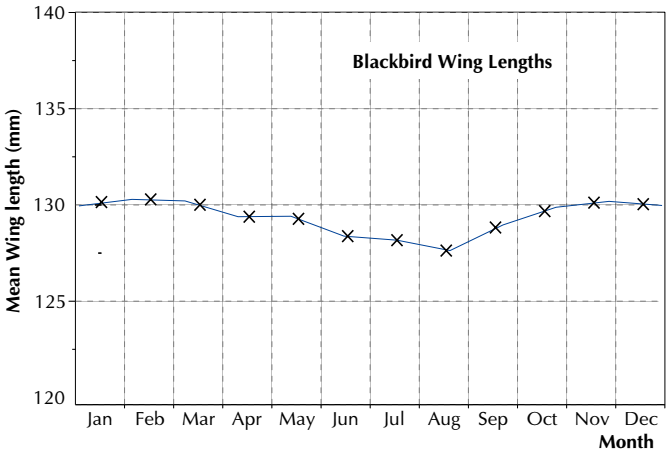
In contrast to the 1,769 PIT tag registrations, our top three Marsh Tits, the target species, have recorded very respectable totals of 1,278, 1,226 and 1,149 readings.

Goldcrest 4M JTE874 30/10/2022 D09

Of the 30 Goldcrests captured this autumn, this is one of only two to have been ringed in the previous winter. This bird has probably travelled a considerable distance between its last capture and this one, possibly including two North Sea crossings, but was recaptured within 100 metres of its original capture position in November 2021.

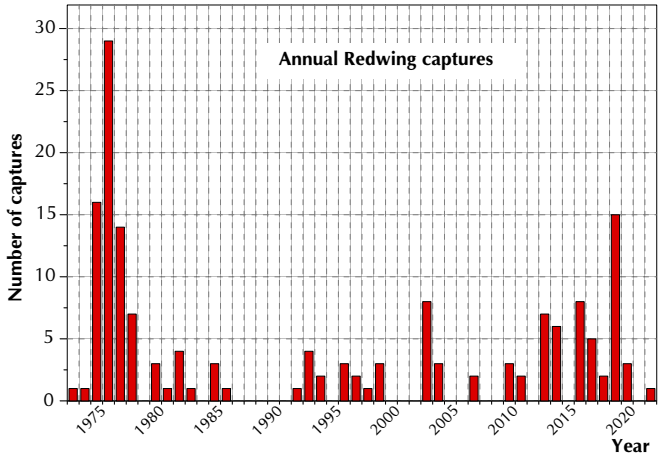
Blackbird 3M LK39280 4/12/2022 N-1

After some weeks with few, or no, Blackbirds, they started reappearing in November. This bird, a first year male, was one of the 14 birds caught on 4th December. Its wing length was 137mm which is very large for a first year male and a second caught later in the day had a wing of 136 mm. The most likely explanation is that there had



been an arrival in the area of Scandinavian birds which tend to be longer-winged than our residents. The mean wing length of the males on the day was 133 mm which is a little above the December mean for males. The average recorded wing length varies throughout the year, as seen in the graph. Early in the year the mean is at a peak but decreases slowly as the longer-winged migrants depart northwards. Thereafter there is a continued steady decline which results from gradual abrasion of the wing feathers. Once the year's birds start fledging in spring the average length continues to decline because younger birds have shorter feathers and, probably, some very newly fledged birds may still have a millimetre or two still to grow. Meanwhile, longer-winged adults will be reducing in number through mortality. Then follows autumn moult and the new feathers, once full grown, are longer than the old, abraded feathers and last year's juveniles will be moulting into slightly longer full adult feathers for the first time. Mean recorded wing lengths increase by the end of moult. As continental migrants arrive and, possibly, some local birds move a little way south, the average length increases to the end of year peak.

Redwing 4 RX91299 18/12/2022 M03

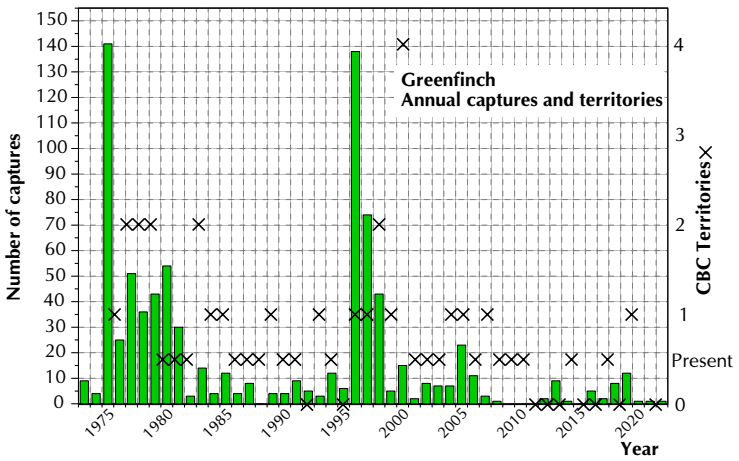


Redwings are notorious for winter 'site unfaithfulness'. They rarely winter in the same place in two successive years. With the small number we have ever ringed coupled with winter site infidelity, it is not surprising that we have had no between-year recaptures. The only two we have re-encountered again are one caught in November 2017 retrapped two weeks later, still in the wood, and another ringed in January 1976 found long dead, in the spring - a casualty of winter. The graph shows the annual captures in the wood of the species.

House Sparrow 2M TY35421 20/11/2022 Q03

This is the only House Sparrow we have caught this year. The previous captures were all on the same morning in May 2021, all at the feeding station and, probably, all coming from the gardens across the road to the North of the wood.

Greenfinch 4M TY35422 4/12/2022 M03



This is our only Greenfinch capture of the year making it the third successive year with only one capture. Like the Goldfinch it has never been an abundant breeding species in the wood. Most captures in the early years were at winter Pheasant feeders and typically we would catch about 40 each year. Populations locally and nationally have been much reduced in recent years by Trichomonosis leading to this formerly very common visitor to gardens now being seen far less frequently. The graphs of capture data and breeding territories in the wood show the same picture of decline.

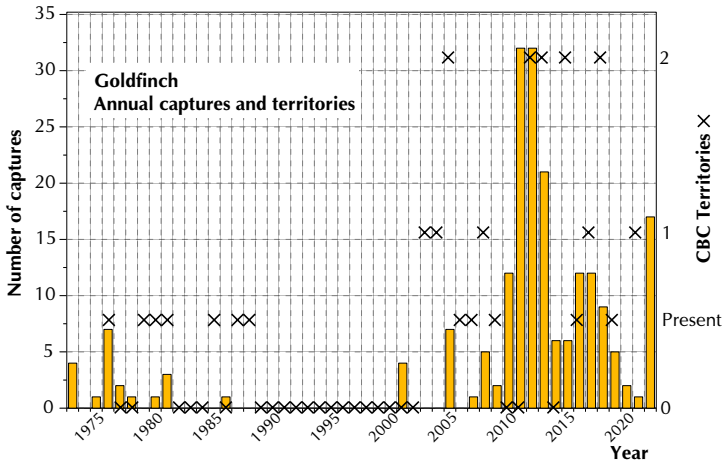
Brambling 3F AEZ3161 20/11/2022 Q03

It is nearly 14 years since we last caught a Brambling in the wood and today we caught two. These are the 24th and 25th we have ever caught. Catching two at once is very helpful indeed for ageing and sexing rarely caught species. It is very much easier to judge shades of colour when there is another bird in the hand for comparison.

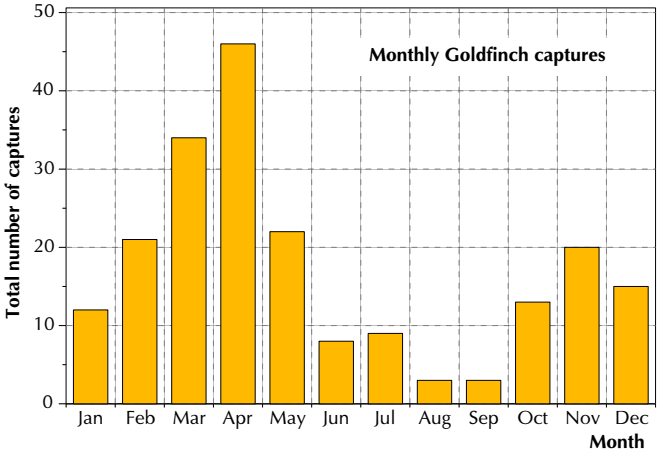
Chaffinch 4M AEZ3118 6/11/2022 Q03

This was the first of 10 Chaffinches caught on the day after a spring and summer with very few Chaffinches encountered. All the birds were unringed and this coincided with reports of influxes of Chaffinches on the East coast in the previous days. Only one of these 10 has been retrapped subsequently so that does suggest migrants moving through. Of particular note was than none of these birds had even the slightest suggestion of infestation by the scaly leg mite. We wondered if the scaly leg mite, although much less common in the wood now than in recent years, is more frequently found in resident birds which may congregate at good feeding sites in gardens.

Goldfinch 3M AEZ3192 4/12/2022 M03



This bird brings the year's total of Goldfinch captures to17 - the highest for a decade and just under 10% of our all-time total. It is only two fewer than the total in the first ten years of the project. Ringing data and CBC territory numbers both reflect a general increase in the species although there are still only very few breeding territories in the wood. Perhaps more interesting is the monthly pattern of captures. The BTO Garden BirdWatch and other surveys on farmland have shown that as numbers on farmland decline through the winter, they increase in gardens. The birds appear to be following the food supply. Once it is exhausted on farmland they move into gardens where there are bird feeding stations. The pattern of our captures is very similar to that in gardens, indicating that the wood tends to be less favoured than farmland whilst the food is available there. It is worth noting the slight increase in July. It may be only a result of low numbers but it is matched by the same pattern, year after year, in GBW data. It seems to be something related to second broods but, at present, we are not sure exactly what.



10-Week Summary: 2022 Interval 5, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	**5**	**3**	**Adult**	**5**	**3**	
Jay	1	.	.	.	.	.	1
Marsh Tit	.	.	.	4	.	.	4
Blue Tit	1	.	2	8	.	7	18
Great Tit	.	.	3	9	.	14	26
Long-tailed Tit	6	.	.	8	.	.	14
Goldcrest	3	.	12	2	.	1	18
Wren	2	.	4	3	.	2	11
Treecreeper	1	.	4	5	.	.	10
Blackbird	4	.	5	1	.	.	10
Robin	3	.	5	3	.	4	15
Dunnock	.	.	.	.	.	1	1
Bullfinch	1	.	.	1	.	1	3
Totals	**22**	**.**	**35**	**44**	**.**	**30**	**131**

Annual Summary - All ringing records 2022

	Ctrl.	New Birds			Retraps		PIT	Recvs.	Othr.	Total
		Adult	Juvnl	Pulli	Rt	SDR				
Sparrowhawk	.	1	.	.	.	.	.	.	.	1
Stock Dove	.	9	.	33	9	.	.	.	.	51
Tawny Owl	.	1	.	.	.	.	.	.	.	1
Gt. Spotted Woodpeck	.	5	3	.	9	.	.	.	.	17
Green Woodpecker	.	.	1	.	.	.	.	.	.	1
Jay	.	3	.	.	1	.	.	.	.	4
Coal Tit	.	7	15	.	72	7	.	.	.	101
Marsh Tit	.	2	5	.	24	.	393	.	.	424
Blue Tit	2	74	75	285	473	42	111	.	13	1075
Great Tit	.	37	54	151	325	46	121	1	10	745
Long-tailed Tit	.	32	1	.	45	2	.	.	.	80
Chiffchaff	.	23	9	.	4	3	.	.	.	39
Blackcap	.	26	17	.	11	11	.	.	.	65
Garden Warbler	.	1	.	.	.	.	.	.	.	1
Goldcrest	.	12	23	.	11	4	.	.	.	50
Wren	.	28	45	12	31	7	.	.	.	123
Nuthatch	.	5	4	.	28	1	.	.	.	38
Treecreeper	.	4	12	.	18	3	.	.	.	37
Blackbird	.	59	23	.	37	6	.	.	.	125
Redwing	.	1	.	.	.	.	.	.	.	1
Song Thrush	.	14	4	4	9	1	.	.	.	32
Spotted Flycatcher	.	3	.	.	.	.	.	.	.	3
Robin	.	23	47	.	41	14	.	.	.	125
House Sparrow	.	1	.	.	.	.	.	.	.	1
Dunnock	.	16	31	.	41	3	.	.	.	91
Chaffinch	.	26	18	.	6	.	.	.	.	50
Brambling	.	1	1	.	.	.	.	.	.	2
Bullfinch	.	13	7	.	13	2	.	.	.	35
Greenfinch	.	1	.	.	.	.	.	.	.	1
Goldfinch	.	8	9	.	.	1	.	.	.	18
Totals	**2**	**436**	**404**	**485**	**1208**	**153**	**625**	**1**	**24**	**3338**

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

10-year Averages since standard site netting began in 1978:

1978 - 1987	90	113	182	140	130	655
1988 - 1997	86	107	170	149	127	637
1998 - 2007	95	100	134	120	125	574
2008 - 2017	93	133	151	109	120	606
Previous 10 Years						
2010	94	100	144	119	143	600
2011	96	112	120	105	101	534
2012	69	125	132	66	72	464
2014	83	132	181	123	120	639
2015	105	123	136	137	158	659
2016	102	185	193	109	109	698
2017	106	198	163	150	163	780
2018	95	108	182	184	119	695
2020	120	---	---	93	174	(387)
2021	...	163	129	90	109	(491)