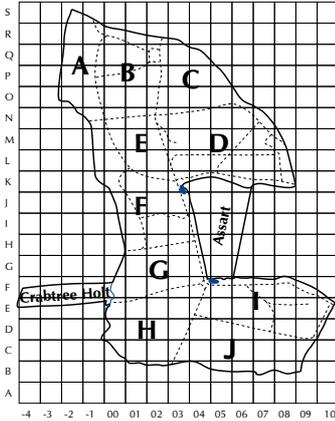


TWITTER



Treswell Wood - Information To Tell Every Recorder

October 2022 Treswell Wood IPM Group
(Integrated Population Monitoring)

Project leaders:

CBC Ellen Marshall

Nest Records Chris du Feu

Ringling John Clark

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2022/4 Number 139

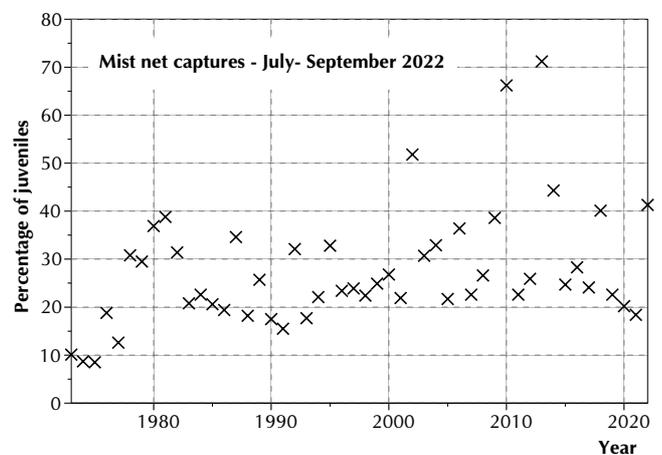
www.treswellwoodipmg.org

The hot, dry summer weather brought very pleasant early morning warmth for the ringers. On the other hand, the heat and dryness later in the day was far less pleasant. Fortunately the wood has plenty of shade and we finish ringing before the full heat of the day. Water levels in both established ponds became very low and the two assart ponds dried completely. The ground became extremely hard and it was difficult boring holes to take the mist-net poles. A tactic we used was to pour water into the hole to turn the dust into mud and allow it to be drawn out rather than dust trickling back into the hole and refilling it as the auger was withdrawn.

Of wider significance is the effect on the trees. By the beginning of August some leaves had already turned brown and were falling. We wonder whether the drought conditions will have increased the advancement of ash dieback. The assart survey, reported more fully below, certainly suggests that the dry conditions have impeded tree growth.

This fourth 10 week interval of the year is the only one which has a complete record since we began standard site ringing in 1978. The other four intervals have at least one missing because of restrictions during the covid pandemic and during the foot and mouth outbreak some 20 years before. The capture total of 99 is well below average although still a little above that of the last three years. This is quite surprising in view of what seems to have been a much more successful nestbox breeding season this year.

Another striking demonstration of the success of the breeding season came on 1st August with 53 of the 56 birds caught being juveniles. The overall ratio of juveniles to adults caught during the period was higher than usual, again putting this year's breeding season into a long-term context. The graph illustrates the ratio of juveniles to adults caught from July to September over the 50 years since ringing began in the wood.



In 1976 summer weather conditions were similar to those of 2022 with a long period of hot, dry weather. Watering holes for birds were in very short supply and large numbers came to drink at the pond. It was apparent from the relative lack of recaptures that many of these drinkers were not resident birds but those passing by, perhaps juveniles exploring the area or birds beginning their southward journey. Ringers then made extra visits to the pond (there was only the one pond at that time) and made large catches of these birds. We expected that this year's conditions might bring birds to drink at the ponds. In spite of the occasional nets set near the ponds and continued watching for birds coming to drink, we have seen nothing out of the ordinary. Why the difference, particularly as 2022 seems to have been a productive breeding season? In 1976 the main pond was fairly new with little aquatic vegetation. Overflying birds would have no difficulty in seeing the water and being drawn to it. Now, the situation is different. Both the ponds (the original one and the pond at Piccadilly Circus) have accumulated large amounts of rooted vegetation and floating duckweed. The area of open water is negligible. Naturally, the water level has also been very low and overflying birds would be far less likely to see what might appear to be, at best, only small puddles as they flew over. The two new ponds in the assart do not yet hold water throughout the year. If they did, being open and obvious, they could well have been used by passing birds.

We have continued to watch for Himalayan Balsam and, happily, have not seen any in the area where it was found in 2020. We will need to continue to watch for it in case there are still seeds left in the soil there. We now think it is likely that the plant first appeared in 2019 with one seed, from an unknown source, germinating in the wood. From that one plant, seeds were dispersed explosively to give the very obvious patch found in 2020 with plants in

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a radius of about 15 metres of the (unrecorded) plant of 2019. We seem to have managed to prevent any seeding in the last two years and hope the seed bank is now extinct. It was very fortunate that the original patch was so near a ride and very obvious indeed. We have not noticed it anywhere else in the wood. If more had arrived elsewhere in the wood in 2019, by now we would have very large, obvious patches. Thankfully none have been seen.

Avian influenza

Avian Influenza is still prevalent in the Midlands. DEFRA has declared a protection zone across the country following an increase in the number of cases detected in commercial premises and wild birds in recent weeks. We continue to take additional measures by disinfecting all equipment between ringing sessions and washing bird bags between use. Fortunately we do not handle any of the colonial nesting species which have been so badly hit, and have neither come across nor heard of any infected wild birds in the vicinity.

Scaly leg mite and Chaffinches

Chaffinches are now less common than they used to be. Early in the year, a large proportion of the few we caught were infected with scaly leg mite and unable to be ringed (see the May issue of TWITTER). In August we caught a Chaffinch which had no trace of scaly leg mite. The scarcity of Chaffinches made us take particular note of the event. After the bad start to the year combined with low numbers of Chaffinches (these two things may not be unconnected) we saw no infected birds between the middle of April and early September. That bird was the only one. Although 2022 has had the highest number of infected birds recorded (9) and the highest percentage of affected birds (29%) it seems that the prevalence may now be reducing. Could the drought have had any suppressing effect on scaly leg mite?

Treswell Wood - 50th Anniversary

John McMeeking's first ringing visit to Treswell Wood was on 17th December 1972. We will mark the event during the ringing visit on Sunday 18th December. There will be coffee and cakes. If you intend to come, please would you let John Clark know so that he can ensure adequate supplies. Even better, if you intend to come for the whole ringing session, let him know. If there are enough ringers we might even have opportunity to site some nets in exactly the same spot as John did all those years ago.

People

It is pleasing to see people who have been associated with Treswell going on to take up positions within the BTO. Peter Kirmond was an active ringer at Treswell in the early years from 1974 to 1983. He moved away from the area (but did not lose contact with us) and now has a seat on the Ringing Committee. Peter has also been invited to join the editorial board of Life Cycle (formerly Ringers' Bulletin). Richard du Feu, who started ringing in the wood at a very early age with his father, is now a trustee of the BTO and has been appointed to the Ringing Committee as the trustee representative.

Sorrel Lyall first came to the wood as a little girl and told us, years later, that handling a bird on that day started her on the slippery slope to a career in ornithology. After graduating in Ecology at Edinburgh University she has secured a post of Ripple Project Officer in the BTO Ireland office. This project aims to engage more young people in Northern Ireland with birds and other wildlife. And who better than Sorrel to do that?

2022 Nest Recording

Unlike most recent years, this summary of the season's events is complete because Stock Dove nesting activity has ceased earlier than usual. The season has been very productive with nearly 500 nestlings fledged, the sixth highest total ever and well above the mean of 335. For the two species, Blue Tit and Great Tit, where we have the most reliable measures of timing of breeding the median first egg date the season is 8 days earlier than the average from 1979 to 2021. There were 60 Blue Tit nests compared to an average of 39 and, in spite of that, the fledging rate of 4.8 per nest was higher than the previous overall mean of 4.1 per nest. Although Great Tits had only an average number of 33 nests, the fledging rate of 4.7 per nest was much higher than the long-term average of only 2.9. This low average results from the early years of the nestbox project when Great Tits suffered from competition with Tree Sparrows and predation (grey squirrels, weasels, wood mice and Great Spotted Woodpeckers). It was only after the turn of the century that their numbers increased dramatically and now appear to be declining to somewhere in the middle. Only one Coal Tit, the same individual as last year, attempted nesting. As last year, this ended in failure. Sadly we have not recorded any Marsh Tit nests this year although we know there are many birds, some of considerable age, present in the wood. Wren numbers are slightly down on average too. In recent years nests of both these species have been found in dormouse boxes. These boxes have now been bird-proofed for the sake of both birds and dormice as we have described in previous issues. It may be that these two species did benefit from the availability of dormouse boxes. We have tried an experimental design of box for Marsh Tits - tall and narrow, sited low down to replicate their supposed preferred type of nest site. And the success rate? Three boxes; three years; no nests.

Events in Nestboxes - Treswell Wood, 2021

Species	Nests		Eggs laid	Birds			% Success Rate	
	Recorded	Successful		Adults caught on nests	Nestlings fledged	Nestlings recaptured (to Oct 10 th)	Nests	Eggs
Stock Dove	30	20	60	10	31	0	67	52
Coal Tit	1	0	10	1	0	.	0	.
Blue Tit	60	41	500	40	289	13	68	58
Great Tit	33	28	214	1	157	35	85	73
Song Thrush*	1	1	4	.	4	.	0	.
Wren	6	2	32	.	12	0	33	38
Chaffinch*	1	0	4	.	0	.	0	.
Totals	132	92	824	52	493	48	70	60

* Open nests.

Tail moult in juvenile passerines

When John McMeeking began ringing in the wood it was well known that juvenile passerines (except those few species that underwent a complete post-juvenile moult) did not moult their tail feathers as part of post-juvenile moult. John made careful, cryptic notes of which feather tracts were moulting. Once the BTO coding system had been defined and we starting computerising our ringing data using that system, we were able to translate John's cryptic notes into appropriate BTO codes. By the early 1980s we starting noticing that some juvenile Great Tits were moulting their tail feathers in contravention of the normal rules. As time went on, increasing numbers of Great Tit juveniles did the same and now almost all do. Other species now sometimes do the same, notably Blue Tits which generally moult just the two central tail feathers rather than the whole tail.

We assume that the increasing number of tail moulting juveniles results from earlier nesting together with extended autumn before winter sets in giving much more time to moult. That is not the whole story, though. One might suppose that the birds undergo normal post-juvenile moult and, finding conditions are good, then continue to moult the extra feathers. Not so. It seems that moult of the tail feathers is initiated early in the post-juvenile moult as if the birds anticipate a longer time available to moult.

Tail feathers are costly to replace so why moult them. The new feathers, typically of adult quality and shape, are more robust than the juvenile feathers. They will last better over the winter and first breeding season. This adult tail shape can give ringers a problem for species which, in the past, could be aged reliably on the tail shape. A bird with juvenile tail shape will still be a juvenile but one with an adult shape could be an adult or else a juvenile which has moulted its tail. Its age can no longer be determined on tail shape alone.

For the record, the numbers of encounters of juveniles in moult and of those moulting tail feathers is given in the table arranged in decreasing order of proportion. We should not take too much notice for species where the total

Species	Moulting tail	in PJ moult	% tail moult
Great Tit	1683	2952	57.0
Whitethroat	1	2	50.0
Blue Tit	411	1661	24.7
Wren	161	719	22.3
Chiffchaff	20	102	19.6
Dunnock	44	361	12.1
Willow Warbler	1	12	8.3
Blackbird	23	295	7.8
Chaffinch	20	298	6.7
Blackcap	11	318	3.4
Bullfinch	17	508	3.3
Willow Tit	5	161	3.1
Coal Tit	11	372	3.0
Song Thrush	1	40	2.5
Marsh Tit	6	265	2.2
Goldcrest	1	51	2.0
Robin	20	1044	1.9
TREEC	2	164	1.2

number of records is under 100 (although they all indicate that occasionally the species will moult tail feathers). We should also remark that these are data from 1973 onwards and so include data from the early years when tail moult was almost unheard of. For Great Tits in recent years the number is very near 100%. It is odd that the three smaller tit species very rarely moult tail feathers whereas Blue and Great Tits now generally do moult them. This is even more curious because these three smaller species tend to nest earlier than the other two which would leave even more time for moulting. Also surprising is that Treecreepers, which suffer massive abrasion of their tail feathers as they creep upwards on rough bark, almost never seem to moult their tail feathers when having more robust adult feather would seem to confer an advantage.

On-line Ringing & Nest Recording Report 2021

The on-line report is now published at https://www.bto.org/our-science/projects/ringing/publications/online-ringing-reports?dm_t=0%2C0%2C0%2C0%2C0 Unlike the printed report which appears in Ringing & Migration and which has some basic tables and much textual material, the on-line report holds just data. The viewer can select tables of bird encounters by area or species, and nest records by area. In addition there are tables of longevity records and graphs showing the timing of breeding and moult for some selected species. It is interesting to look at the Nottinghamshire numbers in particular and compare them with our contribution from Treswell Wood.

Pulli ringed	Nottinghamshire	Treswell Wood	Nest Records	Nottinghamshire	Treswell Wood
Stock Dove	52	24	Stock Dove	32	21
Coal Tit	13	0	Coal Tit	5	3
Marsh Tit	7	7	Marsh Tit	2	2
Blue Tit	599	209	Blue Tit	139	68
Great Tit	180	59	Great Tit	59	34
Wren	37	37	Wren	17	17

Encounters Nottinghamshire Treswell Wood Re-encounter rate

	Ringed	Re-encounters	Ringed	Re-encounters	Notts.	Treswell
Stock Dove	81	17	29	11	12%	38%
Great Tit	964	511	118	196	37%	166%
Goldcrest	208	20	21	5	8%	24%
Wren	268	83	102	56	16%	55%
Nuthatch	39	24	10	21	10%	210%
Treecreeper	42	34	15	30	15%	200%

What stands out? The high proportions of tit nests recorded and nestlings ringed. We were the only Wren nestling ringers in the county. Sadly there were no Willow Tit nests recorded at all in the county and, worryingly, Treswell Wood was the only place where Marsh Tit nests were recorded. Stock Doves have become far more abundant in the county than in earlier years but, thanks to the continuing recording of their nests through the very long season, we provided nearly half of the county's ringed nestlings.

As far as ringing is concerned our overall species totals are not very high but for some species we provide a far higher rate of re-encounters than anywhere else. It is these re-encounters which give so much additional information about movement (or lack of it) and survival. The table gives details of some species. Note that the re-encounter rates do not represent the number of individuals which have been re-encountered but, instead, the ratio of re-encounters to new birds. Thus the impressive rate of 200% for Treecreepers means that some of our individuals have been re-encountered several times. Such high recapture rates are only possible because we concentrate, as John McMeeking always did, on finding what is there rather than merely trying to ring large numbers of birds.

The graphs in the on-line report showing the timing of moult and breeding are interesting and only possible because enough ringers record the state of moult (including where birds are not in moult). Here we do well with almost every encounter record, throughout the year, having a moult code. It is interesting to observe the overlap of timing of breeding and moult. At one extreme tits have little overlap with just a few failed breeders starting moult early whilst most others are still engaged in the nesting process. On the other hand, the overlap with Wrens is far greater because of their multiple broods. Birds with only two broods will start moult soon after the second brood has fledged whilst a proportion of birds (varying depending on the season) will be working on the third brood, delaying their moult by some weeks.

There is a vast amount of information in these tables and well worth examining. All our ringers and nest recorders should be very heartened by their contribution to this invaluable national project.

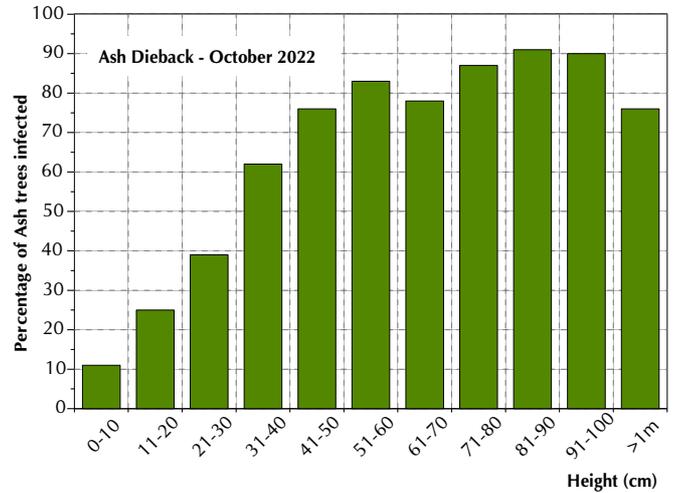
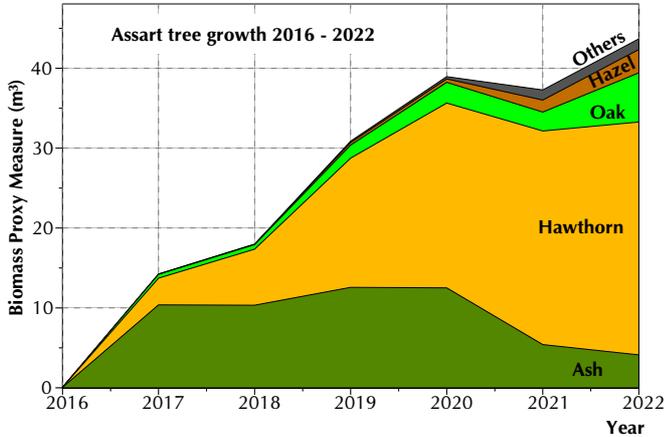
Assart trees

We carried out the annual survey of tree growth in the assart in early October. This included recording the heights of all tree species in the 100 four-metre quadrats. We also recorded whether ash trees were infected with dieback or not, and took fixed-point photographs of all the transects.

The data and photographs agree that there has been, overall, continued growth this year although it seems to be a lower increase than last year. The graph shows what we have called the biomass proxy measure. This gives an index of the total biomass of the woody growth in the assart. Ash is the only species showing a decline in this measure. This results from ash dieback and apparently very little new germination. However, the decline in ash

biomass is more than compensated for by the increase in other species. It is very pleasing to see that oak continues to increase and even more pleasing to have seen one, still young, tree carrying an acorn. There is very little new germination of any species and we wonder if this, and the slower increase in biomass, results from the hot, dry conditions through the summer. Last year gave an exceptionally poor acorn crop which helps explain a lack of new oak seedlings.

The pattern of ash dieback remains the same. Most seedlings are infected in their first or second season giving them little chance to survive any more than another season. Those that avoid infection in the first year or two still have a high chance of infection later. As a result very few



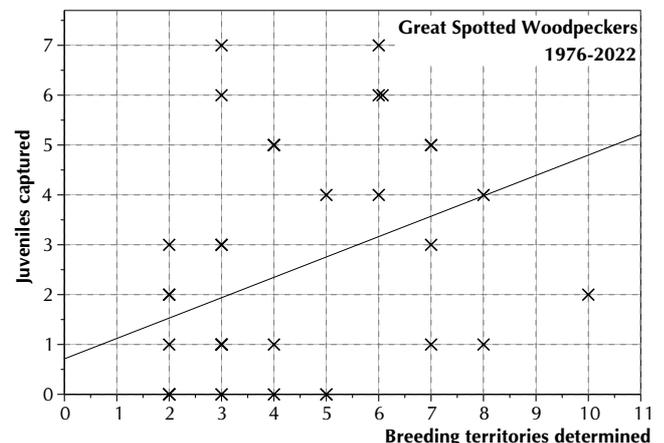
ash trees grow to more than a metre in height. In February 2021 we made a thorough search of the assart and found only three uninfected ash trees over 1 metre tall. Of these three one is dead, one is badly infected and the third seems to be healthy. In addition we have found one more apparently uninfected tree, now about 2 metres tall, but not in one of the sampled quadrats. The second graph shows the proportion of infected trees in relation to their height. Even reaching a height of 1 m is a rare event. It might seem unexpected that the infection rate in the tallest trees is lower than in any height class above 50 cm. The reason is that most trees have died well before that height. What is left is a small number of survivors of which about a quarter are either uninfected or else not yet showing signs of infection.

Two years ago, one 4m x 4m quadrat held 56 ash trees. This year there are only five. It is interesting to speculate what the assart might have looked like had ash dieback not happened. It seems likely that almost all the trees in the assart would have been ash growing vigorously enough to suppress other species' growth. It would have been almost a monoculture. That is certainly not something which would have enhanced the wood's biodiversity. A silver lining to the cloud of ash dieback.

Noteworthy Encounters

Species	Age/sex	Ring	Date	Grid
Great Spotted Woodpecker	3	LK39266	4/9/2022	E02

This is one of three juveniles we have ringed this year. For the first 20 years of the Treswell Wood study, Great Spotted Woodpeckers were infrequently caught and breeding territories were few, in some early years none at all were confirmed. The first juvenile we ever caught was in 1983 and we waited until 1996 for the next one. The territory numbers remained low but fairly stable until the turn of the century when they began to increase, as did the number of juveniles caught. With the disruptions to ringing and territory mapping caused by the pandemic it is hard to tell whether the numbers have dropped a little from those of a decade ago. In spite of the apparent randomness of points, there is a statistically significant relationship between the number of juveniles caught and the number of CBC territory recorded. The number of breeding territories is thus one of other factors contributing to our catch of juveniles.



As is expected, this bird was in primary moult. It is a complete mystery (to everyone, not just us) why woodpeckers start moulting their primary feathers whilst still in the nest before they have ever been used for flight.

Stock Dove 4 **EY42343** **19/6/2022** **D03** **On Nest**

How things change with time. This year, as last year, Stock Doves provided the third highest total of ringed nestlings in the wood. Compare this year's 31 nestlings ringed and fledged with the total number ringing in the first 20 years of the nestbox operation - just four. This species is now third highest in the list of nestlings ringed. They only nested in eight boxes, their clutches are of no more than two eggs and they suffer a high rate of predation. However they are multiple brooded. Two pairs had five successive nesting attempts, continuing to nest until October. That persistence compensates for all the adverse factors.

We have caught several sitting adults, some being retrapped more than once. This bird, for example, was on her second nest of the year, having also been found nesting in the previous three years.

Blue Tit 4 **AAL8687** **1/8/2022** **R-1**

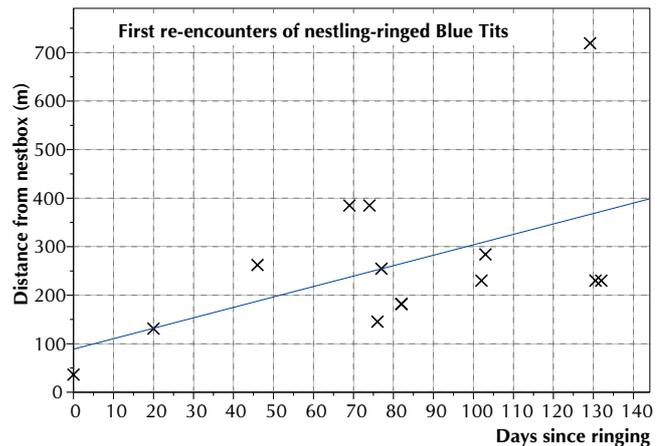
Like some humans, some birds contribute more to our store of knowledge of the natural world. This bird is a fine example. She was ringed as a nestling in 2021, first in January 2022 retrapped and then found nesting in a box in May. That revealed her natal dispersal distance of around 900 metres and also provided us with details of her nesting attempt (sadly failed). On this last occasion she was in moult and contributes to our records of the timing of moult and to information about survival. A fine little bird.

Blue Tit 4 **ANA7356** **4/9/2022**

This birds was ringed in 2018 as a juvenile and recaptured several times in the centre part of the wood. It was last caught at the end of 2019 and some of the ten encounters had been in our standard site nets on Main Ride (South). Since then we have set nets there 11 times and, until now, we had not caught it again. The catch on that day included 32 tits of which this one was one of only two adults, the rest being juveniles.

Blue Tit 3 **AEZ3053** **25/9/2022** **Q03**

Juveniles tend to wander much more widely than adults, particularly in the late summer and autumn when they are familiarising themselves with the lie of the land. Generally speaking, we expect to retrap adult birds fairly near to where we last trapped them. This juvenile was ringed a week earlier, at a temporary feeding station in the south of the wood. A week later it was retrapped in the far north of the wood. The graph shows the distances between the first captures of nestling-ringed Blue Tits from their natal box in relation to the number of days since being ringed. In the first week or two distances gradually increase. Thereafter distances appear more random. In fact the graph underestimates the distances more and more as time goes on because we have no record at all of distances moved by birds outside the wood. Within the wood the maximum possible move is around 1,000 metres.

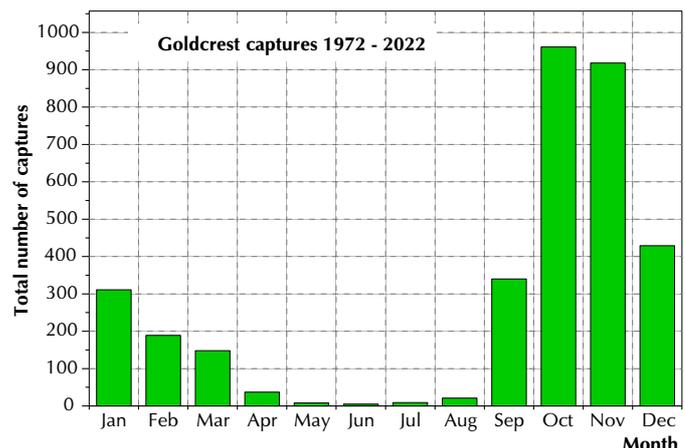


Great Tit 4F **Z782706** **25/9/2022** **Q03**

Late summer is the time when adults moult. They become less mobile and so are caught less frequently in our mist nets. Most of those that we have caught have had relatively short capture histories (perhaps this results, in part, from fewer birds being ringed during covid-related restrictions). This bird is the oldest recent capture by some margin having been ringed 5 years and 205 days ago.

Goldcrest 3F **DRA205**
11/9/2022 **D08**

This was the first of the autumn Goldcrests. The graph shows the total numbers of captures by month, from 1972 onwards. The species is only an occasional breeder in the wood and the captures from April to July are mainly of breeding birds or juveniles reared very locally. From August juveniles will be engaged in post-juvenile dispersal and it is likely that the August, and early September captures of mainly of birds reared somewhere in Nottinghamshire or counties not far away. Mid-September brings the main arrival of the species, both adults and juveniles, on their southward autumn



migration. Some may go no further and winter in the wood, others continue further south. This bird could well be the herald of the autumn arrival.

Blackcap **4F** **AJN3535** **4/9/2022** **H04**

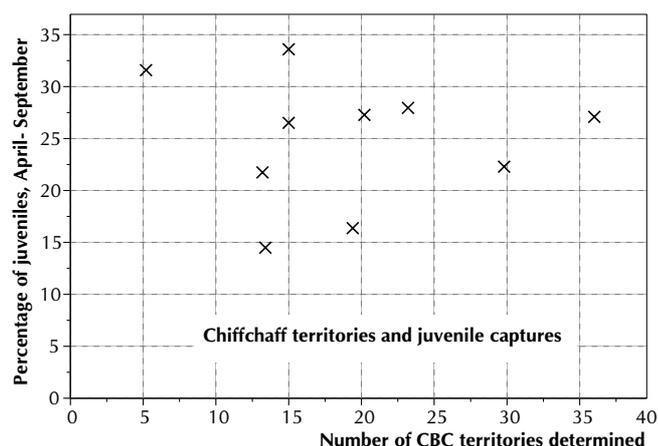
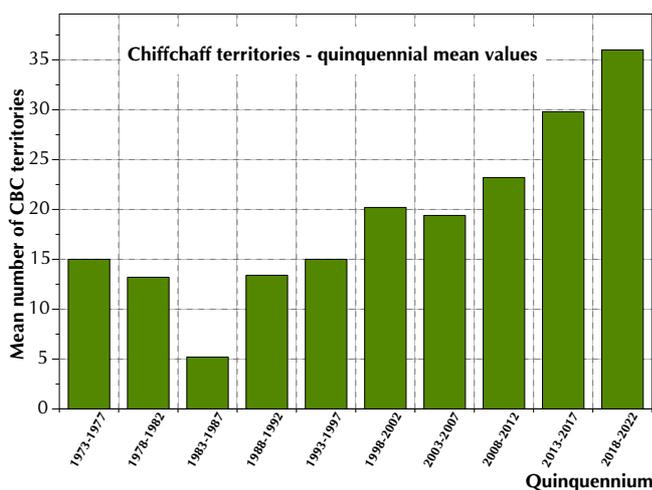
It is no surprise when we retrap Blackcaps close to previous capture positions. This bird has been retrapped five times since being ringed in May 2021. All these captures have been in the same run of nets on Main Ride South including two captures when in breeding condition, both in grid square G04. If it survives to the breeding season of 2023 we have a good chance of meeting it in the same set of nets.

Chiffchaff **4M** **JTE910** **20/9/2022** **Retford Sewage Works. 7km WNW**

Our only controlled bird for some months. It was ringed in April in the wood and retrapped towards the end of May in breeding condition. It would seem it has now started its winter movement which might be southward to Iberia or else might be much nearer if it decides to overwinter locally rather than migrating further south.

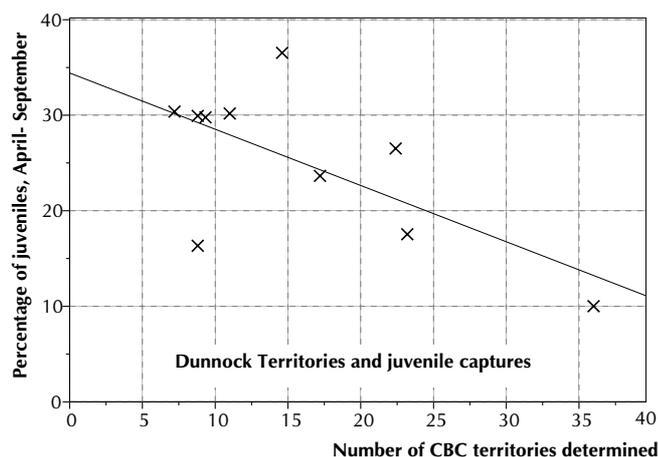
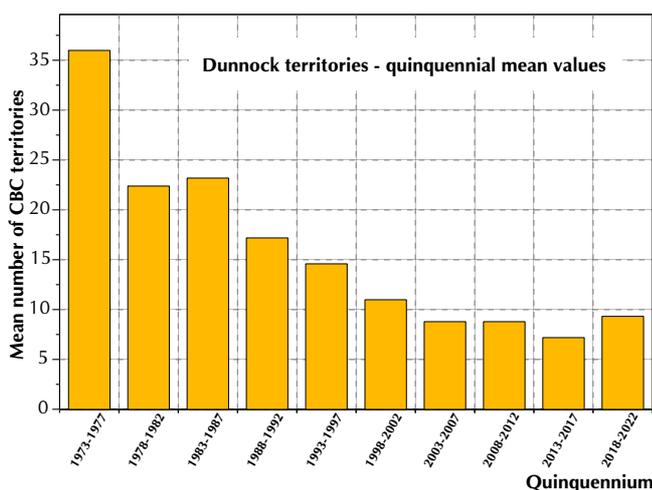
Chiffchaff **3J** **JTE989** **7/8/2022** **K03**

The capture of a juvenile Chiffchaff, after seeing none for a few weeks, prompted thoughts similar those for Dunnocks (see below). The two species are very different. The Dunnock is highly sedentary whereas the Chiffchaff is migratory, or at least partially so. The Dunnock population has decreased whereas Chiffchaff numbers have increased steadily over the years. The data are presented in the same format as for the Dunnock and it can be seen that, in spite of increasing numbers being caught, the proportion of juveniles shows no trend but fluctuates with a typical value being around 25%. If density-dependent breeding success is an explanation for the rise in Dunnock productivity, why should Chiffchaffs not do the same and show a decreasing proportion of juveniles as the total numbers increase? Does migratory behaviour play a part? Has the population not yet reached a stage where density begins to have any marked affect on productivity?



Dunnock **3** **TY35098** **14/8/2022** **Q03**

This was the 23rd Juvenile Dunnock to be caught in the period up to the end of September. This is the eighth highest number in this period in any year and the highest since 1995. After their serious decline to a low point over a decade ago, they seem to be increasing slowly. Perhaps of more interest is the percentage of the Dunnock captures during the breeding season and early autumn which are juveniles. At 42% it is higher than any of the 5-year means and the third highest ever. In the early years when Dunnocks were far more numerous there were



proportionally fewer juveniles. Perhaps that is an indication of density dependent reproductive success. That is something for someone to look at in detail. In 1995 we published a paper on Wren and Treecreeper survival in which we demonstrated for the first time that Wren survival was density dependent. The data set now covers twice as many years. Coupled with the CBC territory as a measure of abundance it is possible to investigate density dependence for all our commonly caught species.

10-Week Summary: 2022 Interval 4, Captures in Standard Sites

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Blue Tit	.	.	1	2	.	.	3
Great Tit	.	.	3	1	.	3	7
Long-tailed Tit	1	.	.	.	.	.	1
Chiffchaff	.	.	1	.	.	.	1
Blackcap	.	.	9	2	.	2	13
Goldcrest	.	.	1	.	.	.	1
Wren	.	.	23	.	.	1	24
Nuthatch	1	.	2	1	.	.	4
Treecreeper	.	.	3	1	.	.	4
Blackbird	1	.	3	3	.	.	7
Song Thrush	.	.	.	2	.	.	2
Robin	.	.	12	1	.	3	16
Dunnock	.	.	6	2	.	.	8
Bullfinch	3	.	5	.	.	.	8
Totals	6	.	69	15	.	9	99

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 20 Years

2001	...	...	94	121	59	(364)
2002	85	89	141	176	117	608
2003	117	116	146	104	114	597
2004	103	128	126	165	132	654
2005	107	140	150	88	133	618
2006	128	98	185	125	166	702
2007	107	110	138	73	92	520
2008	125	130	151	86	100	592
2009	57	130	156	85	80	508
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	688
2019	113	131	170	152	129	695
2020	120	---	---	93	174	(387)
2021	...	163	129	90	109	(491)