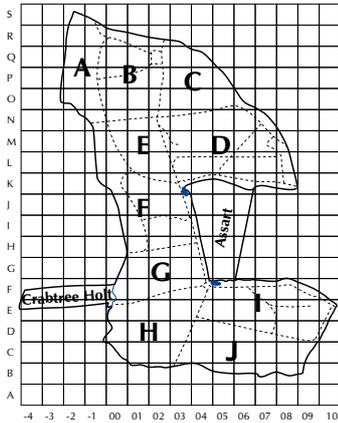


TWITTER

2015/4
Number 104



Treswell Wood - Information To Tell Every Recorder

October 2015 Treswell Wood IPM Group
(Integrated Population Monitoring)

Project leaders:

CBC Pat Quinn-Catling

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Ringing John Clark

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The inspection of a Stock Dove nest on October 1st revealed an empty, predated nest. It was the last of 13 nests of the species recorded this year from a total of six breeding pairs. This inspection marked the end of the 2015 breeding season and the right time to thank all the various people who have taken their part in recording its events. We have managed to cover the wood with the CBC survey of breeding territories - and this includes surveying of the assart. We have completed the visits for the BTO Constant Effort Scheme and followed all our nestbox breeding species right through the season. All records are now with the BTO. Thanks to all who have taken part in the CBC, nest recording and ringing - your work is much valued and much appreciated.

Our standard site captures for the last 10-weeks are tabulated as usual. Overall, in spite of the mediocre breeding season, captures have been a little above the long-term average (which is surprising), rather higher than at any time since the mid-1990s but nowhere near the early days of our constant effort operation which began in 1978. Our most abundant species this time is Wren - its multiple-brooded breeding has allowed it to recover from the late, cold spring and benefit from better weather later on. Robins are regaining their former numbers and Bullfinches have been surprisingly abundant. Unexpected absences from the list are the Great Spotted Woodpecker and Chiffchaff. The former has been heard less frequently this year and the latter species may have moved southwards earlier than usual. They have been replaced by wintering Goldcrests which are now heard and caught frequently.

The previous issue of Twitter noted the apparent lack of wood mice and the consequent negative effects on Tawny Owls breeding, and also the positive effect on breeding tits because of lack of mouse predation. The few mice that did survive the winter appear to have had an excellent breeding season. During the October check of dormouse boxes, 20 were found with wood mice - the first time this year that they have been present in any numbers. In addition two boxes held dormice confirming that these elusive little creatures are still surviving in the wood.

Looking forward, there are several events which need to be mentioned. Lincoln University will be undertaking a long-term monitoring programme in the assart as it returns to mature woodland. The first operation is to mark a grid of sampling points. This will be done, hopefully, by the time you read this. Thanks, in advance, to the volunteers who help and to the Notts. Trust for encouraging and supporting this operation.

Two forthcoming conferences will be of interest to members. First is the Nottinghamshire Birdwatchers' annual conference on November 22nd at Ravenshead village hall. (Note that we plan to ring in the wood on 21st November to accommodate this event). Full details of this are on the NBW web site at www.nottsbirders.net Highlights include Ian Newton talking about raptor migration and our own young county star, Sorrel Lyall. There will be a second hand natural history book stall, as last year, with proceeds going to the Treswell Wood assart project. Donations of books to this stall will be welcome at, or before, the event.

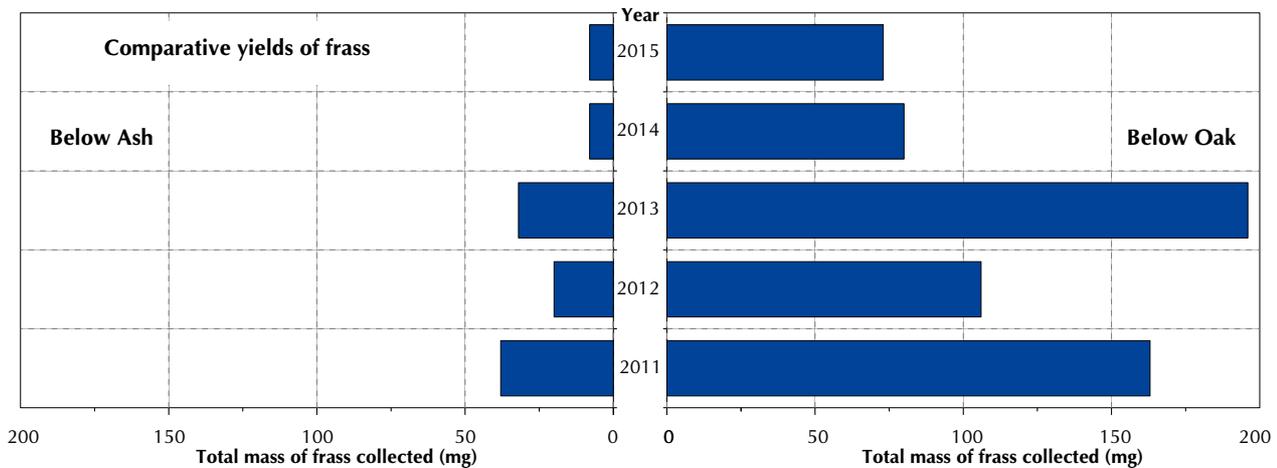
The second conference is the annual main BTO conference at Swanwick from 4th - 6th December. (This is one of the very few weekends when no ringing is planned.) Booking can be done via the BTO web site www.bto.org

Finally, we would like to remind you of the Nottinghamshire Wildlife Trust raffle. Tickets are available at £1 each from John McMeeking. An anonymous donor has offered to match the money raised by our group for this raffle. Of this generous amount, half will go to the NWT, the other half will go specifically to support the bird monitoring work of the group in Treswell Wood. The top three prizes are £500 cash, a year's supply of bird food (up to £250) and 24 bottles of Castle Rock Ale. We hope you will be able to support the Trust and the group's operations in this fund-raising exercise.

Frass

We have now completed the fifth season of collecting frass from below some trees in an effort to assess the relative abundance of the caterpillar crop, and also its timing in relation to that of the tits' breeding season. Thanks to Ken Smith for doing the hard work of separating the frass from the dross and weighing it. The diagram shows how the

total amount of frass from the six frass traps (three each under oak and ash) has varied from year to year and also how different the crop is below ash and oak trees. It appears that the oak is about six times more productive of frass (and therefore of caterpillars on which the nestling tits are fed) than the ash. In fact, one of the three frass traps below an ash tree collected no frass at all throughout the 2015 tit breeding season. The truth is probably that there is an even bigger difference between the two tree species. Frass, being light, will drift in the wind rather than



always falling vertically. In a wood which holds more or less completely one species of tree, what frass drifts from one tree to below another will be replaced by frass from a third tree drifting underneath the first. Frass abundance in a trap will represent what is falling from the tree above, even though the frass in that trap may not all come from that tree above. In a wood with mixed tree species, drifting frass from a tree with a high caterpillar crop may land in a trap under a nearby tree of another species which produces less frass. However, because little frass falls from these trees, the loss of frass from below the tree with the heavy crop will not be made up by frass from the light-cropping trees. Thus frass collected under our ash trees, with low caterpillar productivity, is likely to overestimate the crop, whereas that below the oak will underestimate it.

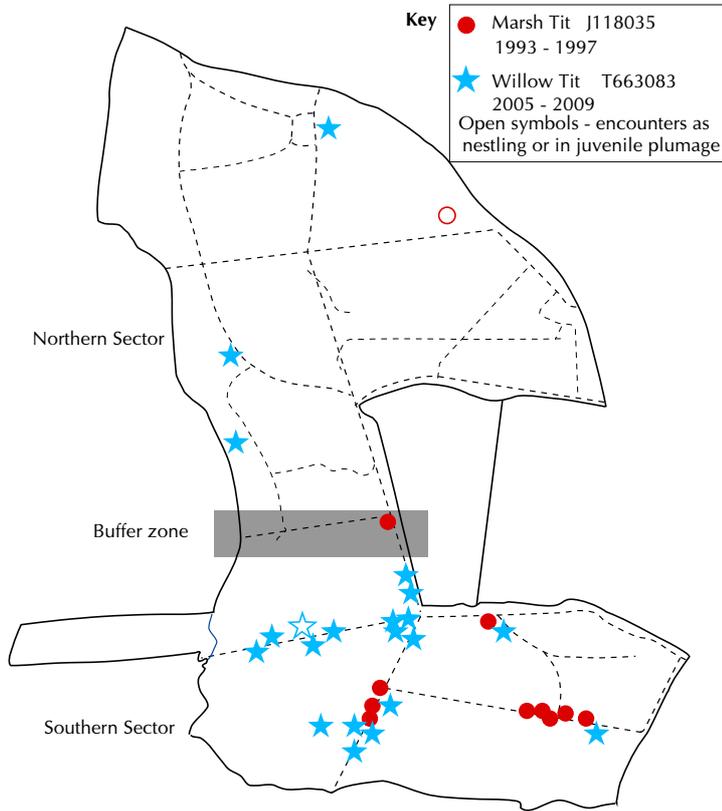
It will be very interesting to see what happens when (as it is almost certain to do) ash dieback strikes the wood. Happily we now have the five-year record of frass gathered in the pre-chalara era, so that we will be able to see the impact of the death of ash on the overall caterpillar crop in the wood.

Marsh and Willow Tit movements

These two tit species are very sedentary indeed. This is obvious when we look at recapture histories of individuals. What became apparent years ago was that, not surprisingly, juveniles may wander widely in the wood but adults generally remained within a limited range within the wood. Perhaps more surprising was that, as far as these tits were concerned, the wood was divided into two parts - the northern (26 ha) and southern (20 ha) sectors separated by a very narrow buffer zone. We noticed that it was exceptionally rare to find an adult of either species which 'belonged' in one sector to be caught in the other. In the very few cases where this happened the bird was generally trapped again back in its home sector. A paper by J. Ekman in *Ornis Scandinavica* (Vol 10, no 1, 1979) suggested that Willow Tits formed 'group territories' in winter where perhaps five breeding pairs would combine their breeding areas and forage throughout the whole combined area. This fitted well with the pattern of movements we had looked at in the wood where the Willow and Marsh Tits tended to move more widely than Blue Tits but had a strict upper limit of movement. The sharpness of the demarcation line would suggest we have two group territories - the northern and southern tits. Incidentally, Treecreepers seem to share the same sharp demarcation line in the wood with few adults ever crossing it. We have not done any very detailed analysis of this. The superficial analysis below was prompted by the juvenile Willow Tit we have captured and recaptured several times this year and also by the several Marsh Tit siblings we have been retrapping.

Overall it seems that there is, indeed, a demarcation line in the wood and this is the same line for both the Marsh and Willow Tits. Juveniles will happily cross the line - indeed many seem keen to do so as part of post-natal dispersal. The time at which juveniles become northern or southern birds seems to be very early - sometimes even before post-juvenile moult is over. Thereafter movement across the buffer zone may not need be controlled by UN peace-keeping troops, but is certainly rare. The map illustrates the buffer zone and two sample capture histories. One is of a well-behaved Marsh Tit, moving from its natal north to the south for its adult life. The second is an exceptional Willow Tit which changed sectors for the last year of its known history with the three captures in the north. Typically, a capture in the other sector is followed by a return movement. This looks like a clear change of sector between breeding seasons.

The analysis is preliminary and the data really deserve a much more thorough examination. Birds have been



classified into four groups: ringed in the nest (Pullus); ringed before completion of post-juvenile moult (Juvenile); young birds after post-juvenile moult (Young); and full grown birds (Adult). This latter category includes birds late in the year which could not be aged other than as full grown and so will include some young birds.

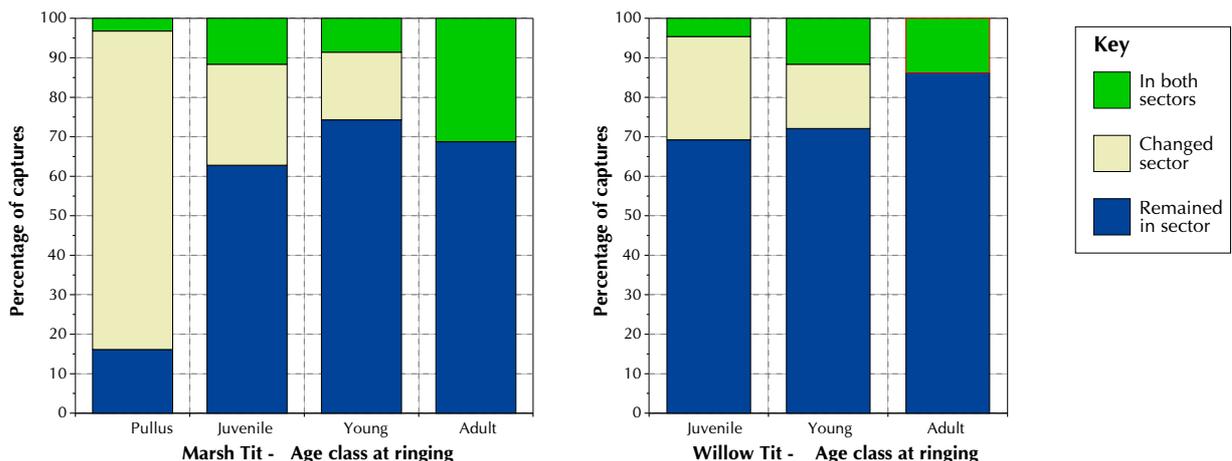
In each category, birds were examined for subsequent captures and these were categorised as being in the same sector or different sector. The buffer zone was counted as being in both sectors. No reference was made to the time of year at which subsequent captures were made but only subsequent captures as 'Adult' were tabulated. There were two possibilities for Adult birds and three for the other three categories. These three categories are: all Adult captures in the same sector as the first capture, all Adult captures in the other sector or at least one Adult capture in each sector. For Adult-ringed birds the two possibilities were all captures in one sector or at least one capture in each sector. Each individual with a recapture history then contributed one point to the results table.

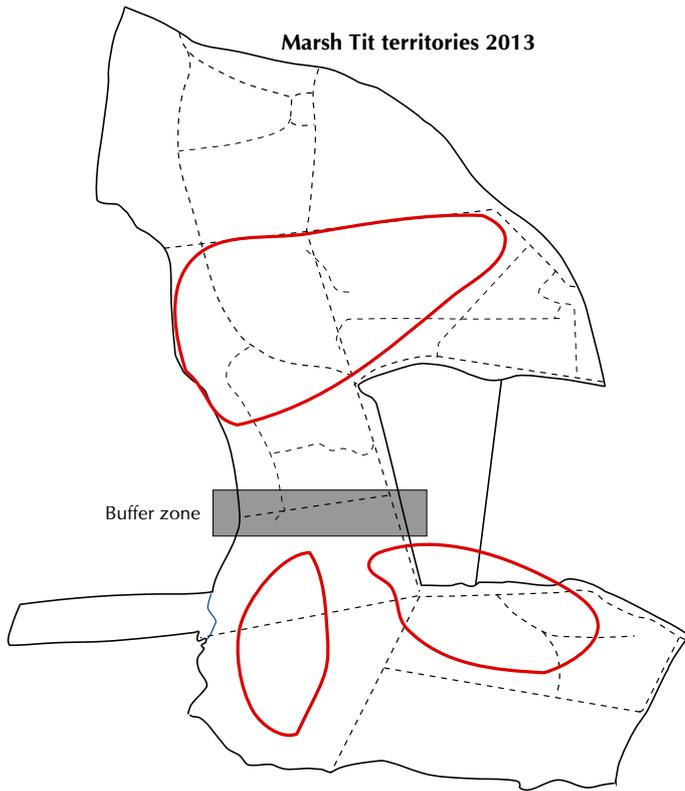
Subsequent recaptures of Marsh Tits and Willow Tits

Ringed as	Marsh Tit			Willow Tit		
	Same	Changed	Both	Same	Changed	Both
Pullus	5	25	1	-	-	-
Juvenile	27	11	5	45	17	3
Young	26	6	3	31	7	5
Adult	22	-	10	75	-	12

At first glance it seems that relatively many adults can be found in both sectors (e.g. 10/32 Marsh Tits). In fact, when birds ringed before being full-grown are included only 19 from a total of 122 individual Marsh Tits have been found to cross the line when full grown. Further, of these birds, most have only been found on the wrong side once; only a very few have recapture histories which indicate a genuine change of breeding or winter territory. In total, for both species, we have only 39 individuals which have been recorded as full grown on both sides of the line during more than 40 years of ringing. It is, indeed, a rare event. It also seems that the move (or not) from natal sector is often determined very early in the post-fledging period, with the proportions of stayers and movers being nearly the same in the Juvenile and Young categories. In the case of Marsh Tits where we have nestbox-using birds, it is clear that the majority of individuals do change sector, a far greater proportion than for the juveniles which have, presumably, often moved to their final sector by the time they are first captured.

Movements of tits between sectors in Treswell Wood





The picture painted by the CBC territory mapping over the years is much the same. In almost all cases, territories have been contained in either the north, or the south of the wood with territories rarely straddling the North/South demarcation line beyond the narrow buffer zone. A typical set of territories is illustrated showing relatively large territories but wholly within the north or the south. The table gives the total numbers of Marsh and Willow Tit territories mapped since the 1973 breeding season.

Territories in	North	South	Both
Marsh Tit	41	27	1
Willow Tit	34	41	7

A fuller analysis of these data would require more rigorous classification of birds by examination of their capture histories so that some birds could be more accurately classified as Young rather than Adult. It would be interesting to look at the timing of extra-sector escapades - winter or breeding season? A detailed examination of individual histories, particularly those of nestling-ringed Marsh Tits, could also throw light on the timing of the post-natal dispersal process.

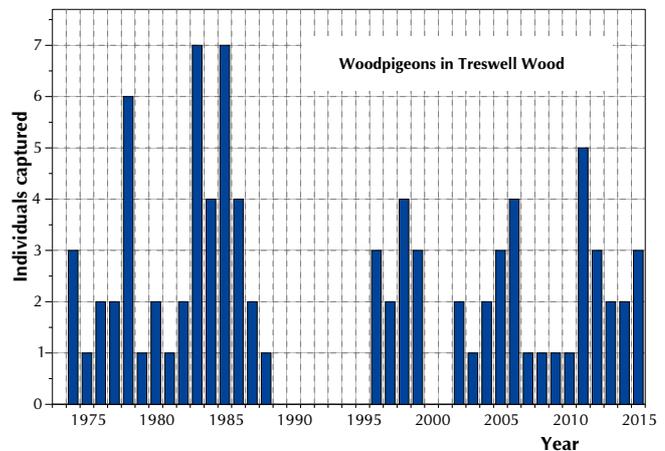
Noteworthy Encounters

Species	Age/sex	Ring	Date	Grid
Tawny Owl	8	GR24214	30/8/2015	C03

The Tawny Owls failed to breed in nestboxes this year - probably because of a shortage of small mammals (as suggested in an earlier Twitter). They remain in the wood but we have heard them less often during our ringing visits. Probably, with such a poor breeding year, there are few juveniles anywhere so territorial competition is much lower than normal. Altogether we have ringed 27 Tawny Owls as adults, of these 13 have a subsequent recapture or recovery history. Most have been trapped whilst on young in a nestbox - captures in mist nets are very rare for us. This bird, first mist-netted in September 2014 is one of only three that we have ever captured in a mist net and subsequently recaptured.

Woodpigeon	4	FP97238	13/9/2015	N04
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Memory can be an unreliable friend. We know how much more abundant this species is than 20 years ago. We felt we were catching them more frequently than in recent years, but a look at the data reveals an intriguingly different picture. Captures during the early years increased to a peak in the 1980s. After that we had a complete absence of captures for seven years followed by more captures but, typically, lower than in the 1980s. The abundance of the species in gardens and farmland does not seem to be mirrored in Treswell Wood. A glance at the BTO BirdTrends web pages shows that we are not alone. Although Woodpigeon numbers have increased over the past 15 years in almost all habitat categories, they have decreased in deciduous and coniferous woodland (but, very curiously, not decreased in mixed woodland).



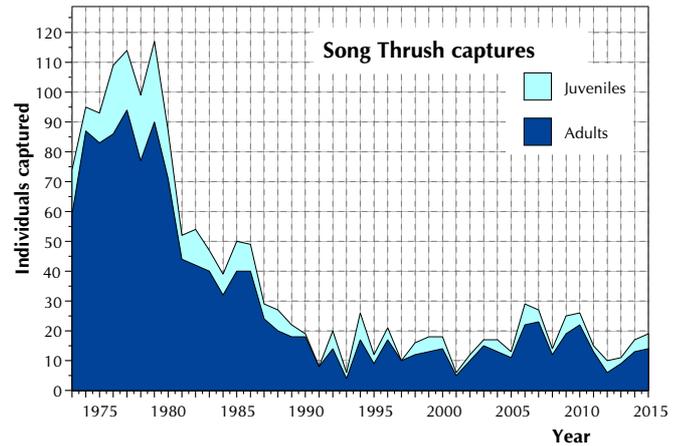
Song Thrush	3	RW58295	27/9/2015	P05
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In the previous issue of Twitter we noted a flush of Song Thrushes. Happily, we have continued to capture more, although still in far lower numbers than in the 1970s. The graph shows our annual captures. Obviously the final 2015 number may yet rise but we do not expect many more this year because they have always seemed to be summer visitors to the wood. Recent captures have been mainly of juveniles, indicating a breeding season better than for single-brooded species. The graph of numbers of individuals caught each year shows the sad decline but,

also, that numbers seem to have at least stabilised. The graph has separated adult (dark blue) from juvenile (light blue) captures. It can be seen that the proportion of juveniles this year (36% of the total) is rather higher than the long term average of 23%.

Great Tit **L803345** **4F**
 6/9/2015 **D08**

At just two and a half years since this bird was ringed, it is far from our oldest Great tit. Yet it has, perhaps, the most consistent history of seasonal migration, albeit not at any great distance. It was ringed at Hillcrest Farm in Treswell village in March 2013 at the time when some birds are still on the move in search of breeding territories. It was next captured in the wood in May 2013 during the breeding season. Autumn and winter found it back at Hillcrest Farm, but it was in Treswell Wood again for the 2014 breeding season. In November 2014 it was back at Hillcrest Farm. We did not catch it during the 2015 breeding season but this September capture in the wood seems to have been before it set off on its autumn migration to the village.



Great Tit **4F** **X649376** **20/9/2015** **N00**

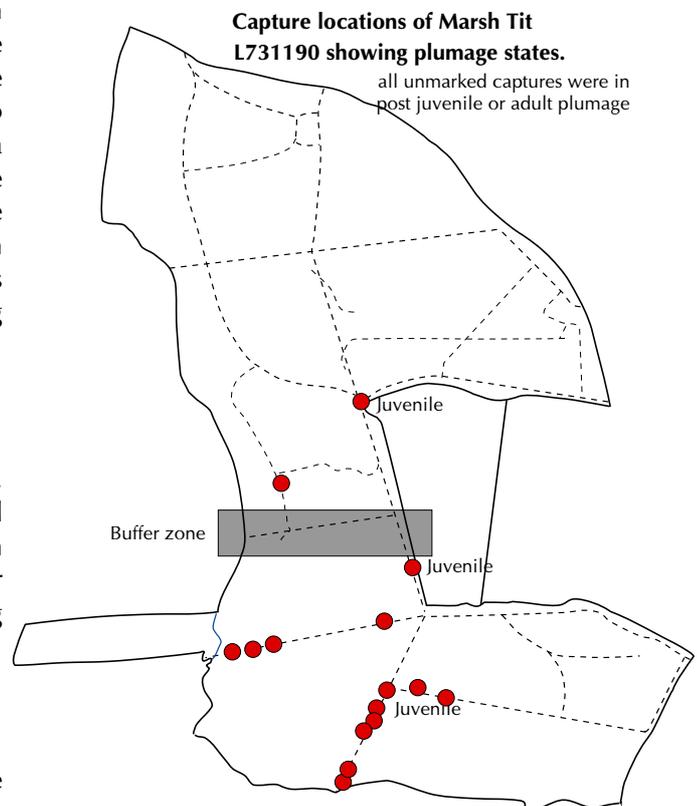
This is the oldest bird captured recently. It was ringed in January 2010, arriving as one of the early birds in the annual spring influx of the species. At 5yr 8mth since ringing this is only our 12th oldest Great Tit and it has to survive another two years to reach the record. It is a female. Normally we would expect early arrivals in the wood of any species to be male birds. Something we have never looked at is the composition of Great Tits in this spring influx. Is conventional wisdom that males come earlier true for our annual inward spring movement?

Marsh Tit **4** **L731190**
 30/8/2015 **B03**

This has a respectably long capture history - 4yr 2 mth. The map shows the places where we have trapped it and it can be seen that it is almost a well-behaved bird, with only one Adult incursion recorded into the wrong sector (and this was in its first spring before it was in breeding condition).

Marsh Tit **3** **D808160**
 11/10/2015 **P01**

This is one of a brood of 10 Marsh Tits ringed in the south of the wood. We have, so far, trapped five of this brood. All of them have already moved to the north from their natal nestbox in the south - more evidence of the potential rapidity of determination of the adult range?



Willow Tit **3** **D309868** **11/10/2015** **Q02 Feeder**

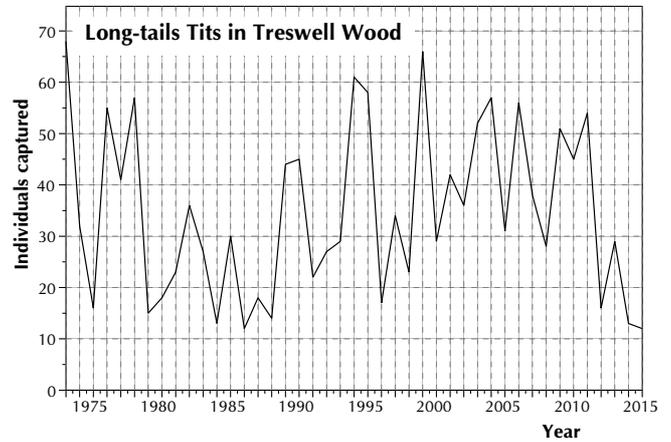
This is the Willow Tit mentioned in an earlier Twitter. In keeping with convention, it has moved from the south of the wood to the northern area where it now seems to be settled. We made an appeal to ringers two years ago to look at the colour of the nasal hairs on Willow Tits. We thought that the colour could be useful in separating the species from Marsh Tits. Information from other ringers is that nestlings and juveniles have black nasal hairs, the same as Marsh Tits. This is the first Willow Tit we have captured recently. On its first capture it did, indeed, have the black nasal hairs. However, on this most recent recapture it appeared that the nasal hairs were not jet black but did have a tinge of brown. Whether this was through moult or abrasion, we are not sure. So far we have seen only black nasal hairs on Marsh Tits. Willow Tits in the wood in former times mostly seemed to have obvious chocolate brown nasal hairs. There is still some way to go before we can be sure, but it does seem that chocolate brown nasal hairs can only be found on Willow Tits. Black hairs can be found on both species but (possibly) not on older Willow Tits.

Nuthatch 4F TR47546 4/10/2015 E00

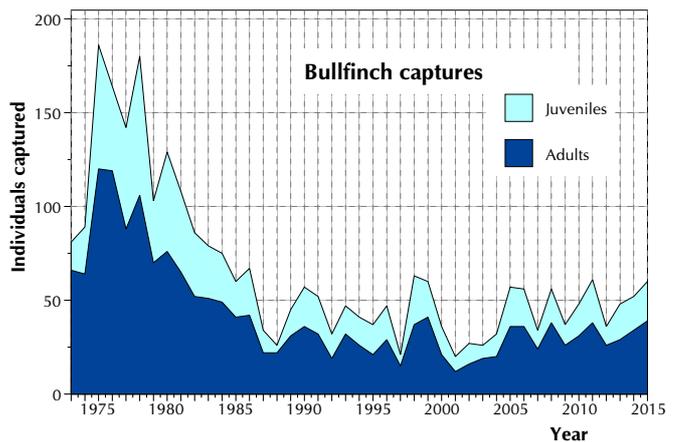
This Nuthatch, caught 5 yr 1 mth since ringing as juvenile is our oldest recorded. They are one of the larger small woodland passerines and so it might be expected that their survival would be higher than for other species. However, this does not seem to be the case. The BTO BirdFacts web pages give the annual adult survival as 51% which is lower than that for the Great Tit at 58%. That difference in survival translates to an average life span for a Nuthatch of two years compared to three years for the Great Tit. Size is not everything. Perhaps more restricted food and habitat choice than the very adaptable Great Tit has something to do with it.

Long-tailed Tit 4 EYD500 20/9/2015 N-1

The long, cold spring was very bad for this single-brooded, early breeding species. As a result, our captures of the species this year have been very low. This was an unringed bird and our first capture of the species since April. Happily it was followed by a party of six in October. All these were unringed birds that had almost completed moult so it was impossible to determine if they were adults or juveniles. It will be interesting to see if we ever retrap any birds ringed before spring 2015. At present it seems possible that the woodland population failed to breed this year and may have become extinct. Captures in the last four years have dropped seriously - possibly as a result of a run of harder winters and poor breeding seasons.

**Bullfinch 6M D309433 30/8/2015 E04**

Like the Song Thrush, this species suffered a massive decline during the 1980s followed by a period of low population size. Recent years, though, have seen a welcome, steady increase in numbers captured. The graph shows the picture using the same conventions as for the Song Thrush (above). This year's proportion of juveniles has been 54% - exactly the same as the long-term average in the wood, indicating a 2015 breeding season relatively better than for most species. The Bullfinch is multiple-brooded so will have been able to take advantage of better weather later in the year, unlike the single-brooded species.

**10-Week Summary: 2015 Interval 4, Captures in Standard Sites**

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Woodpigeon	1	.	.	.	.	.	1
Tawny Owl	.	.	.	1	.	.	1
Wren	.	.	29	2	.	4	35
Dunnock	2	.	5	2	.	.	9
Robin	1	.	17	2	.	2	22
Blackbird	.	.	5	1	.	.	6
Song Thrush	2	1	2	2	.	.	7
Blackcap	3	.	4	.	.	.	7
Goldcrest	.	.	6	.	.	.	6
Long-tailed Tit	1	.	.	.	.	.	1
Marsh Tit	.	.	1	2	.	3	6
Coal Tit	.	.	.	.	.	1	1
Blue Tit	.	.	.	3	.	.	3
Great Tit	1	.	1	2	.	2	6
Treecreeper	.	.	4	1	.	.	5
Bullfinch	3	1	12	2	3	.	21
Totals	14	2	86	20	3	12	137