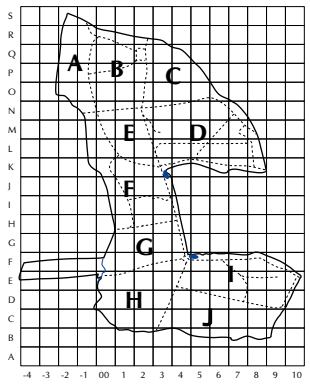


TWITTER

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

October 2007 Treswell Wood IPM Group
(Integrated Population Monitoring)

All projects by permission of NWT

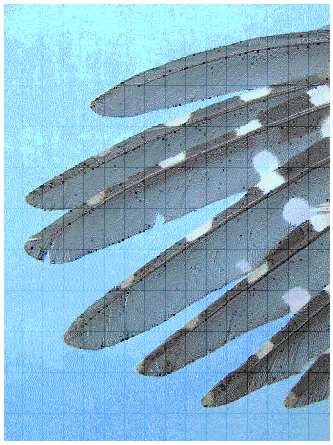
Project leaders:

CBC Pat Quinn-Catling

Nest Records Chris du Feu

Ringing John McMeeking

2007/4
Number 64



Photograph: John Clark

August to October standard-site captures

Where are all the birds? Examination of the standard site captures shows we have suffered the second lowest ever 4th-period capture total. Only 1986 was marginally worse, with 68 birds. This total of 73 is just about half the average number in this interval. Judging by comments from local householders, the birds do not seem to be in gardens either. It is not just the standard sites that are producing few birds - on some visits the feeders have been far from productive too.

David Glue, in his 10-weekly 'thank-you for Twitter' letter, remarked on the season with his whole-country perspective. Breeding success was good early in the season - for residents which began promptly. Thereafter, the wet weather took its toll on later nesting birds, particularly insect-eating summer visitors. Post-fledging survival of tits has also been poor. Overall he concludes 'a cruel, dismal summer'. Certainly our recaptures of nestling-ringed Blue Tits have been very few - only 3 out of the 89 nestlings known to have fledged. Early Great Tit captures were good, particularly at the feeders, but these have fallen to a low level recently. Is there a bright side? Any birds which do manage to survive the winter should not suffer great competition and might be able to look forward to a productive breeding season in 2008.

As usual, we have collected used nests for the National Nest Reference Collection in Glasgow. These were delivered in early October. We donate all nests of target species (which include Song Thrush) together with nests built by known individuals. This year's collection includes the third nest from a particular female Blue Tit, together with a nest from one of her daughters, reared in one of the nests already in the collection.

BTO Atlas Launched

After many months of preparation, the new Atlas fieldwork begins on November 1st. The new atlas will cover both breeding and wintering distributions. It will take information from dedicated atlas surveys and from a vast range of other BTO recording schemes. Without any extra work we will be contributing to the effort through our various operations. One area which we could easily miss is that of recording our casual observations. For example, although we may, sometimes, have hundreds of roosting corvids in the wood, they are not recorded as nesting, breeding or ever ringed. This is a big omission for species which may have, at peak times, a higher total biomass than any other species. We do record observations of these, and many other species, on our field sheets. What would be useful would be for a volunteer to undertake the task of collating and submitting these casual records to an appropriate BTO survey - BirdTrack would be appropriate (and would also allow eventual submission of many years of past data). Any volunteers?

Sexing method - why record codes?

Some species can be sexed, almost completely reliably, on well-defined plumage characteristics - Chaffinches and Blackbirds for example. Others can be sexed reliably by some biometric characteristic - the Sparrowhawk is the only species we catch where male and female wing lengths have no overlap range. For many species, such as the Dunnock, there is not sufficient difference between plumage or biometrics to allow reliable sexing on any of these characteristics and sexing may only be possible in the breeding season (and for some species, such as the Garden Warbler, even the presence of a well developed brood patch is not a reliable indication of femaleness). That leaves species where there is some difference between some biometric or plumage characteristics - the Blue Tit is a prime example. Some individuals are clearly either male (long wings and bright plumage) or female (short wings and dull plumage). Why not record the sex on the field sheet? For birds sexed on wing length alone there is little point as the wing length will be recorded and this will be quite sufficient to identify the sex (if that is agreed to be an appropriate criterion). However, in many cases it is the combination of wing length and colouration that makes the bird clearly male or female. The wing length alone will not give the sex. Should sex be recorded?

The problem here is that recording sex for these birds will give a biased data set. Only larger males and smaller females will be sexed. In any subsequent analysis, we will be comparing, not males with females, but big males with small females. We will be omitting any larger females or smaller males. Clearly, any conclusions may not be representative of the population as a whole. One view is that such bias-inducing sex identification should not be recorded. A contrary view is that, if we know the sex, we should record it. Fortunately the BTO coding scheme allows a productive compromise solution.

Whenever the sex is determined in any way other than absolutely reliable plumage characteristics, the sexing method code must be recorded. The advantage of this in any analysis, is that records of birds sexed in a way that will lead to any sort of bias can be discarded from the analysis. In our case, this means that we should record the code S when birds are sexed on size (or a combination of size and brightness, or even on brightness alone), B for birds sexed on presence of brood patch and C for those sexed on cloacal protuberance.

What sort of biases might be induced? Clearly for birds sexed on size, differences between males and females are likely to be accentuated. For birds sexed on breeding apparatus, there are likely to be other biases. They are, by their nature, birds that have already survived their first winter and so are likely to be fitter than those which have already died. Their life expectancies might, therefore, be expected to be longer than typical. On the other hand, breeding females during the breeding season might be expected to have a lower life expectancy than non-breeding females at the same time (the non-breeders will not be subject to attack on the nest and will be less stressed by the work of rearing the brood). And sure enough, our data do show differences. The table below gives the length of capture history for birds trapped during the breeding season and 'sexed' by wing length and by breeding apparatus. The table also gives mean weights for these birds in January and February. At first glance that suggests the future (or past) breeders are lighter than those never trapped in breeding condition. However, the 'females' sexed on wing length alone will include a proportion of males - which tend to be heavier.

Breeding birds	**Females**		**Males**	
Sexed by	Brood patch	Size	Cloaca	Size
History length (years)	0.57	0.61	1.19	1.09
Mean weight, g (Jan/Feb)	10.2	10.5	11.2	11.2

The second analysis, given below, seems even more surprising. The figures in the sexed-by-size columns are based on analyses of all Blue Tits with their sex selected simply by examination of wing length. However, it is completely flawed and included here just as a warning of what not to do. The population of all birds includes a large number of juveniles captured in the summer or autumn. These juveniles have a lower recapture rate than adult birds for two reasons. First, their survival is known to be lower than that of adults. Second, even if they do survive, they are more likely than the adults, who have already settled in the wood, to leave the wood and breed elsewhere. They also have a shorter past history than many of the birds first sexed on breeding apparatus in the spring, which had been captured earlier in their lives. This may add, perhaps three months to the average history length of birds sexed in the breeding season. The apparent life expectancies of both sexes are more-or-less halved from those given above.

All birds	**Females**		**Males**	
Sexed by	Brood patch	Size	Cloaca	Size
History length (years)	0.57	0.37	1.19	0.55
Mean weight, g (Jan/Feb)	10.2	10.6	11.2	11.2

So what is the average life expectancy of males compared to that of females? That is left as an exercise to the reader. The point of this analysis has not been to discover this. It has been to show that the results of an analysis depend heavily on the way samples have been selected. Without them, we cannot know whether to include a particular bird's data in the calculations. And that is the reason why it is so important to record sexing method codes.

Finally, spare a though for the data entry slave. He has to make a decision. If there is no absolute sexual plumage dimorphism, should the sex of a bird be entered if the sexing method is not given? He could either enter the sex with no sexing method (this is unsatisfactory as it would give biased data with no means of knowing that the bias was), or decide what the sex method code was (and working out what went on in others' minds is not always reliable) or omit the sex. This last course is the only safe one to adopt and therefore is the one adopted.

Ageing Great Spotted Woodpeckers

We have noted, from time to time, the problem of ageing this species. We have suspected that the white spots on the primary tips are not reliable as an indicator of age and have been recording, and photographing, the primaries

of individuals for some time. With a fairly high recapture rate, we can have a clear picture of whether these spots do indeed help with ageing. BWP states that five innermost primaries on adults can, (but do not always) have white spots on their tips but juveniles have white terminal spots on all except the small, outermost, primary. The photograph on the front page shows a typical bird after the autumn moult. Without prior information, it is impossible to assign any age code other than 2. It could be either a juvenile which had moulted its primaries (as they all do) or else an adult which had completed its full moult. The spots on primaries do tend to indicate a juvenile (although we have captured known adults with spots on more than the five innermost primaries) but are absolutely no help in identifying a juvenile. These juvenile primaries are moulted before the red cap disappears completely. Far easier to look at the cap to identify the age. Beware, of course, of one or two isolated red feathers in an otherwise fresh black cap. One of our adults continued to regrow one or two red feathers in its crown during at least two successive moults.

Next, we can examine the wing coverts including the primary coverts which, unlike in passerine moult, do not moult with the matching primary. Juveniles tend to moult from the inner coverts outwards so there may be a clear contrast between new, black inner coverts and browner, more faded old outer coverts. Adults will have uniform black coverts. Simple - except that some juveniles are not very systematic in their moult and may have some inner unmoulted coverts or outer moulted coverts. Adults, too, can be unsystematic in their moult and leave a few randomly placed unmoulted coverts. These will be faded and brown, contrasting with new black coverts. Some birds we have recaptured in the past and known from their ringing history to be adults, have had so many unreplaced coverts that they appeared to be generally unmoulted outer coverts with just a few replaced - typical of a juvenile. (Occasionally, you may find a juvenile which easy to age - there will be contrast within the lesser and median coverts - outer, older coverts will be browner contrasting with the black, inner and newer coverts. This one will be safe to age as 3/5.)

The safe strategy is to age all these woodpeckers as 2 (or 4 in the new year) until we have more certain means of ageing them reliably. Take a good look at new and old coverts and at the secondaries, with the bird in one hand and its known capture history in the other hand.

Noteworthy Captures

Species	Age/sex	Ring	Date	Grid

Great Spotted Woodpecker 2M CT84336 21/10/2007 P00
Our cover bird. A typical set of outer primaries with no white terminal spots. We have captured both known adults and known juveniles with this many white-tipped primaries. Without any other information it can only be aged as a 2 (although we know from its previous captures that it is a bird of this year).

Blackcap 3M V475378 23/9/2007 Q01
The last capture (so far) of the species. It was a new bird to us so would appear to be a juvenile on its journey southwards. Over the year we have captured 66 individuals - slightly fewer than typically in recent years but many more than in the 1970s and 1980s. It is interesting to compare the long-term increase in Blackcap and Chiffchaff captures in the wood with the long-term, serious decline in Garden and Willow Warbler numbers (no captures and one capture respectively this year).

Chiffchaff 2 BYP753 7/10/2007 E02
It has not been a bad year for this species - with 40 individuals being captured. Two of these have been controls (ringing details not yet known). In spite of the difficult weather conditions during the season, this is the greatest number of individuals we have ever captured in any year and a far cry from the penny numbers captured annually in the 1970s and 1980s. This was our last bird of the autumn, being captured a month after the previous capture of the species. Is it a late-departing summer bird, a newly arrived winter visitor or a vagrant resident?

Goldcrest 2F 2U4168 21/10/2007 P00
Most of our Goldcrests appear to be juveniles, according to Svensson. Certainly the autumn population of this tiny winter migrant must be heavily dominated by juveniles but perhaps not to the extent it might seem. This bird, and 2U4187 which was retrapped in the same net, were ringed almost exactly year ago. It is rare for us to retrap a Goldcrest in a second winter, unprecedented to retrap two on the same day, let alone in the same net. They had originally been ringed on the same day (but not at the same time). 2U4187 was trapped again in November and December of 2006. However, thereafter 2U4168 had not been retrapped until now. This latter bird did not have broad rounded tail feathers supposed to be carried by adults. They were pointed, although not particularly narrow. Exercise caution before assigning an age code, other than 2, to such birds.

Our first Goldcrest of the season, a juvenile female BYP711, was trapped on 2/9/2007.

Marsh Tit **4** **R558610** **9/9/2007** **F08**
Our nestling-ringed bird from 2004, recorded breeding in both 2005 and 2006. This year, without the RSPB observing our Willow and Marsh Tits we do not know whether it bred successfully or not.

Coal Tit **4** **R123538** **21/10/2007** **Q02 feeder**
Another nestbox product living to a good age. This bird was ringed in the south of the wood as a nestling in 2002 and was retrapped several times until November 2004. This is the first recapture since that date. It obviously uses the feeders - most of its captures have been there. If it has remained within the wood, it is not easy to explain how it has avoided capture for the last 3 years.

Treecreeper **4** **5Z1470** **23/09/2007** **Q01**
The 21st capture of this individual, ringed as a juvenile in July 2002 and only ever trapped in the north-west quarter of the wood. Still some way to go to break the national age record of 8 years, 0 months, or our own record of 7 years, 5 months but it is our fourth longest-lived Treecreeper.

Nuthatch **4M** **BE34065** **28/8/2007** **Q02**
We are catching this species fairly regularly now. This bird has two successive records of primary moult with scores of 38 on 29th July and 46 today. The BTO moult guide only has 10 other such paired moult records for Nuthatches. In July, this bird was at a stage typical of those recorded. However, during the last month, its moult has only progressed very slowly and the bird is now very much in the tail end of the recorded moult pattern.

Controls and recoveries

Species **Age/sex** **Ring** **Date** **Place**

Blackbird **2** **CT84257** **23/5/2007** **P03**
The long dead remains of this bird ringed, as a first breeding season male, 100 metres away from the spot almost exactly a year before.

Chaffinch **4M** **P400619** **23/9/2007** **Q02**
One of our old friends, ringed in December 2001 and trapped in most years since then. It last live appearance was in July. Its remains were found near the feeder, cause of death unknown.

Chaffinch **4M** **R502946** **23/9/2007** **Q02**
Two years younger than P400619 but with a similar history, this bird's remains were found at the same time.

Blue Tit **4** **T100569** **9/9/2007** **E10**
Ringed by John Clark at Hillcrest Farm in Treswell on 13/10/2006; this is its first appearance in the wood.

10 Week Summary 2007 Interval 4, Captures in Standard Sites

Visits 1854, 1855, 1857, 1848, 1850, 1847, 1852

	New Birds			Recaptures			Total
	Adult	5	3	Adult	5	3	
Wren	.	.	11	1	1	.	13
Dunnock	.	.	1	1	.	.	2
Robin	1	.	8	2	.	2	13
Blackbird	.	.	1	2	.	.	3
Song Thrush	1	.	.	.	.	.	1
Blackcap	.	1	2	1	.	.	4
Chiffchaff	.	.	.	1	.	.	1
Goldcrest	1	.	1	.	.	.	2
Long-tailed Tit	2	.	.	2	.	.	4
Marsh Tit	.	.	1	.	.	2	3
Willow Tit	.	.	.	.	.	1	1
Coal Tit	.	.	1	.	.	.	1
Blue Tit	.	.	3	3	.	.	6
Great Tit	1	.	1	3	.	3	8
Treecreeper	.	.	.	2	.	.	2
Bullfinch	1	.	6	1	.	1	9
Totals	**7**	**1**	**36**	**19**	**1**	**9**	**73**