Ringing at Paxton Pits Local Nature Reserve 2007

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Information, vital for conservation, can be gathered from watching and counting birds, but such methods do not allow for birds to be identified as individuals. However, through bird ringing we can monitor bird populations, movements and longevity in order to try to understand more about bird ecology – something that pure monitoring alone may not achieve. By placing a lightweight, uniquely numbered metal ring on a bird's leg, it enables a reliable and harmless method of identifying birds as individuals. Each ring also has an address so that anyone finding a ringed bird can report where and when it was found, <u>http://blx1.bto.org/euring/lang/pages/rings.jsp</u>. This information will be kept in a database by the British Trust for Ornithology (BTO), passed onto the original bird ringer and the original capture information passed to the person who refound the bird.

Bird ringing originally took place at the Reserve during the breeding seasons of 2000 and 2001 as part of the national Constant Effort Site (CES) scheme run by the BTO. This project is run at a large number of sites across Britain and seeks to monitor bird populations and species that are poorly covered by other census methods. It is also a useful tool in monitoring changes in survival rates between years, breeding success and numbers of birds at both a national and regional scale. The methodology requires 12 evenly spaced visits between the start of May and the end of August. The same number of nets are erected and approximately the same amount of time is dedicated each year to allow for comparable data. Similar to the Breeding Bird Surveys (BBS) monitoring that the BTO also run, it is very difficult to analyse the data collected at a local site scale. However, this data is fed into a much wider analysis at a regional and national scale and has been successfully used to monitor changes productivity; in adult survival and see the BTO website for more details www.bto.org/ringing/ringinfo/ces/index.htm.

After a break of six years, bird ringing began again in May 2007 with the agreement of the Paxton Pits LNR management committee. This was again run as a BTO CES project and help was provided from three MSc students from the University of Reading and Rosemary Setchfield. A minimum of 96m of netting was erected on each visit with up to an additional 48m dependent on weather conditions and the number of people helping. Twelve visits were made, in what was a cool and wet breeding season. This poor weather probably affected early breeding attempts quite badly. Fewer juveniles were caught later in the season (July and August) than perhaps would have been expected in a good breeding season. However, 360 birds of 22 species were caught and ringed. The pick of the birds caught was a Nightingale originally captured on 21st April 2001 and re-caught on 13th May 2007. It was originally caught as an adult and therefore would have been at least one year old at the time of original capture. It was sexed as a male and therefore could perhaps be described as the 'Grand-daddy' of Paxton Nightingales given that the current longevity record for a Nightingale in Britain is seven years 1 month!

Species	Adult	Juvenile	Unknown age	Nestlings	Total number of birds ringed	Retraps from previous years
Green	1	2	0	0	3	0
Woodpecker						
Great-spotted	0	1	0	0	1	0
Woodpecker						
Wren	4	16	0	0	20	0
Dunnock	11	13	0	0	24	0
Robin	11	39	0	0	50	0
Nightingale	6	1	0	0	7	1
Blackbird	15	1	0	0	16	0
Song Thrush	4	4	0	0	8	0
Reed Warbler	6	2	0	0	8	0
Lesser	5	5	0	0	10	0
Whitethroat						
Whitethroat	1	2	0	0	3	0
Garden	5	15	0	0	20	0
Warbler						
Blackcap	13	24	0	0	37	0
Chiffchaff	5	9	0	0	14	0
Willow	13	21	0	5	39	0
Warbler						
Long-tailed	9	16	0	0	25	0
Tit						
Blue Tit	14	12	0	0	26	0
Great Tit	10	7	0	0	17	0
Treecreeper	2	6	1	0	9	0
Chaffinch	4	1	0	0	5	0
Greenfinch	0	3	0	0	3	0
Bullfinch	9	6	0	0	15	0
Totals	148	206	1	5	361	1

Table 1. The number of birds caught during CES ringing.

Beyond the CES season, ringing continued through September in an attempt to monitor what level of migration occurred through the pits. The low scrub in the Sanctuary is particularly suitable for *Sylvia* warblers, such as Blackcap and Lesser Whitethroat, which can be particularly difficult to observe using normal monitoring methods. We concentrated our efforts here, rather than over the area we used during the CES season. This proved extremely successful and a further 200 birds were ringed. More than 100 Blackcaps were caught including three controls, i.e. birds originally ringed elsewhere and retrapped at Paxton Pits. Details have been received for one of these birds:

V378184 3m 08.08.2007 Holme-next-the-Sea, Norfolk 09.09.2007 Paxton Pits Nature Reserve, Cambridgeshire 32days, 94km, SW

This was a juvenile male and may well have been bred locally to Holme, before beginning its migration in late August, although there is a possibility that it may have been migrating already when it was first caught. Original ringing details are still awaited from the BTO for the other two controls.

Other birds of interest that were caught during this period included a series of moulting female Chiffchaffs, a Redwing, two juvenile Marsh Tits, an adult female Jay, a Reed Bunting and a Bullfinch that was originally catptured at Paxton Pits on 4^{th} May 2002. In addition, two Lesser Whitethroats with a very short 2^{nd} primary, which possibly suggests an eastern European origin rather than a British origin were captured at the seemingly unlikely early dates of 3^{rd} September and 9^{th} September. Further checking of the wing formula of Lesser Whitethroats during future breeding seasons and autumn migrations should inform us how regular birds with this wing formula are.

Species	2001	2002	2007
Sparrowhawk	-	1	-
Turtle Dove	1	1	-
Kingfisher	1	-	-
Green Woodpecker	1	-	3
Great-spotted	-	-	1
Woodpecker			
Wren	29	11	22
Dunnock	26	10	26
Robin	28	10	60
Nightingale	17	4	8
Blackbird	16	5	29
Song Thrush	8	2	10
Redwing	-	-	1
Sedge Warbler	9	6	-
Reed Warbler	17	6	9
Lesser Whitethroat	15	11	15
Whitethroat	7	10	5
Garden Warbler	20	9	24
Blackcap	50	16	172
Chiffchaff	30	15	30
Willow Warbler	25	13	29
Goldcrest	1	-	-
Long-tailed Tit	17	17	34
Marsh Tit	-	-	2
Blue Tit	13	45	39
Great Tit	25	21	17
Treecreeper	-	9	9
Jay	-	-	1
Chaffinch	5	4	6
Greenfinch	5	5	5
Bullfinch	21	19	17
Reed Bunting	2	2	1
Totals	390	252	575

Table 2. The total number of birds ringed during 2007 with comparison against the ringing activities of 2001/2002.

Overall, the ringing of birds at Paxton Pits has been very successful. It is hoped to continue the CES study in 2008 and beyond, along with continuing to monitor the levels of migration in autumn through the site and perhaps the early and late breeding successes of the birds of Paxton Pits.