

WICKEN FEN (BIRD RINGING) GROUP

Report of 2016 activities

The Wicken Fen (Bird Ringing) Group has been in continuous operation for 49 years, having been founded in 1968. By the end of the year 2016 the overall ringing total was 120535; of this total, about 675 birds have subsequently been reported away from the Fen (92 of them abroad).

The Group, at 31 December 2016, numbered 38 members and 20 registered Friends or Associates. Additionally there were, at any one moment, about a dozen would-be ringers/trainees/visitors on the Group's "books". Coverage at the Fen, measured in hours, was roughly similar to that in 2014 and 2015. Ringing operations with nets were conducted on 155 different days, involving 3154 member- (man- & woman-) hours. These netting sessions were held in every month, with the majority of sessions, 76, being carried out on St. Edmund's Fen (Compartments 30-35) while 44 sessions were at the Reedbed (Compartments 51-53). The ringing hut at North Field/Gallops (Compartments 20-23) was also used regularly (now that the 2015 resident hornets had been evicted), with 35 sessions being conducted there. In the summer/autumn there were also 10 sessions in the more "remote" areas (9 of these to Burwell Fen; Compartments 201-205). In addition, many days (estimated as 450 hours) were spent in nest-finding, and the subsequent ringing of nestling birds (329 in all) – these involved both nestboxes and open nests, the latter involving almost all areas of the "old" and "new" (vision) Fen. The Nesters Report forms a separate publication.

The 2016 ringing total was 4761 birds, of 59 different species. In addition to the 4761 "new" birds in 2016, 692 "retraps" (birds already bearing rings) had been originally ringed at the Fen in years earlier than 2016, and a further 34 were "controls" (birds originally ringed away from the Fen, but captured at Wicken) – so a total of 5487 different birds were handled. Several species topped the 100 mark, the highest scores being Reed Bunting 720, Reed Warbler 449, Blue Tit 425, Blackcap 338, Meadow Pipit 255, Redwing 208, Chiffchaff 223, Great Tit 165, Swallow 147, Greenfinch 146, Wren 141, Sedge Warbler 140, Blackbird 139, Goldfinch 127, Robin 112, House Sparrow 102; the next most numerous were Long-tailed Tit 97, Bearded Tit 93, Goldcrest 74, Yellow Wagtail 73, Chaffinch 71, Dunnock 69, Bullfinch 54 and Cetti's Warbler 51.

The Reed Bunting, Redwing, Bearded Tit and Yellow Wagtail totals are all-time Wicken records, while the Grasshopper Warbler ringing total (14) is the highest since the "miracle year" of 1973 when 23 were ringed (along with 17 Snipe, 22 Kingfishers, 111 Willow Warblers and 258 Song Thrushes)!

The more "unusual" species, normally ringed in small numbers, remained much the same as in recent years – Sparrowhawk 1, Kestrel 1, Water Rail 1, Collared Dove 1, Cuckoo 5, Kingfisher 8, Green Woodpecker 1, Jay 1, Magpie 3, Firecrest 1, Redstart 2, Whinchat 1, Spotted Flycatcher 1. The single Marsh Tit and Marsh Warbler were particularly unusual. No new species was added to the Group's ringing list in year 2016, which thus remains at 106 species.

The overall ringing total (4761) is the fourth-highest total ever (behind the 5608 of 2011, the 4969 of 2014 and the 4868 of 1973); however a simple look at the annual ringing totals does not allow more than the sketchiest interpretation of the year, in comparison with former years (the Group's Standard Sites and now Constant Effort Sites provide this data more accurately). Nevertheless, the 2016 totals suggest that, while many species remained at recent average levels (Wren, Robin, Dunnock, Blackbird, Song Thrush, Blackcap, Chiffchaff and Long-tailed Tit), there were only few significant gains (Cetti's Warbler), while several species showed continuing (Whitethroat, Garden Warbler and Willow Warbler) or more surprising (Chaffinch and Bullfinch) retreats. Blue and Great Tits recovered from the disastrous 2015 nesting season (see Nesters Report) – it is interesting that the nestbox ringing totals showed that Great Tits exceeded Blue Tits in all years up to about 2009, but that the situation has been reversed every year since.

Two of the species caught in significant numbers were those repaying the effort put in by a small number of dedicated Group members, using lure calls in the autumn (after the end of the Constant Effort Sites sessions) at Burwell Fen. These efforts produced almost all (250) of the 255 Meadow Pipits and over 70% (520) of the 720 Reed Buntings.

During 2016 we received news of the origins of some ringed birds recently trapped at Wicken Fen – Reed Warblers from Belgium, Netherland, Suffolk, Sussex and Essex; Blackcaps from Spain and Norfolk; Chiffchaff from Hertfordshire; Willow Warbler and Goldcrest both from Norfolk; Meadow Pipits from Yorkshire and Norfolk; Robin from Northampton; Reed Bunting from Nottingham and Barn Owl from Norfolk. The total of ringed “imports” to Wicken Fen during the lifetime of the Group so far, stands at about 340, with 26 of these coming from abroad.

A large total (56) of Wicken-ringed birds were reported from elsewhere in 2016. The most distant travellers were a Reed Warbler, a Sedge Warbler and a Song Thrush, all to France. Other travellers were a Goldfinch to Northern Ireland; Reed Warblers to Tyne & Wear, Kent, Suffolk and Sussex; Chiffchaffs to Surrey and Sussex; a Blackcap to Suffolk; a Lesser Whitethroat to Lincolnshire; a Robin to Sussex; a Blackbird to Suffolk; Greenfinches to Lincolnshire and Berkshire; a Lesser Redpoll to Lincolnshire and Reed Buntings to Rutland and Suffolk. Further birds moved lesser distances, mainly to our neighbour, Kingfishers Bridge, where a ringing site was newly established, but some to other parts of Cambridgeshire.

Recapturing our own birds showed some longevity, the oldest birds (strictly just the interval between first ringing, and last recapture) being a Long-tailed Tit and a Chaffinch both at 8 years 6 months (the former a WFG record), a House Sparrow at 7 years 11 months (also a WFG record), a Great Tit at 7 years 6 months, a Blue Tit at 7 years 5 months, a Robin at 6 years 6 months, a Reed Bunting, a Blackbird and a Chiffchaff each at 5 years 10 months (the last-named another WFG record), a Cetti's Warbler at 5 years 9 months, a Blackcap at 5 years 1 month and a Reed Warbler at 5 years 0 months.

In 2016, for the sixth successive year, Constant Effort Sites monitoring of the birds at the Reedbed (REECES) was carried out. The second CES, at St. Edmunds Fen (STECES), following the same pattern as REECES, with twelve 8-hour sessions at approximately 10-day intervals, was also completed in its third year. These CES efforts are organized, and analysed, by WFG members Michael Holdsworth and Peter Bircham/Chris Quyn respectively.

The task of digitizing the backlog of the Group's ringing and retrap data (going back to 1968) was, at last, completed. This mammoth task was master-minded by Neil Lerner, to whom great thanks are due. Neil and Chris Quy are now involved in testing, and no doubt soon implementing, the BTO's new online computerisation scheme.

The Group remains most grateful to the National Trust for granting permission for ringing on the Reserve, and for assisting with expenses. In turn, the Group in 2016 assisted the National Trust staff by putting on some ringing demonstrations. The University of Cambridge, in their turn, made a significant financial contribution to the National Trust, to assist with scientific studies at the Fen (the Ringing Group qualifies under this heading). Group members also collaborated with Anglia Ruskin University for the fifth year by demonstrating ringing to its MSc (Animal Behaviour) students. Some Group members assisted with bird-ringing away from the Fen where they were able both to gain more experience, and to contribute expertise. Specific scientific support was also given, by Group members, to the University of Cambridge studies on Great and Blue Tits under the leadership of Dr. Hannah Rowland in Madingley Wood.

The Secretary has maintained his production of regular Bulletins (8 in year 2016), keeping Members and Friends informed, not only of ringing activities, but also of general bird observations at Wicken Fen. He also produced monthly summaries of the Group's activities, which are displayed in the Thorpe Building at the Fen. Anyone interested in joining the Group is welcome to contact him, Dr. Chris Thorne, at St. Catharine's College, Cambridge, CB2 1RL (phone 01954-210566, email cjrt@cam.ac.uk).

C.J.R. Thorne, 30 January 2017

Report on Wicken Fen nests 2016

(a) Small Nest Boxes

Of the 84 nest boxes monitored across the Fen in 2016 (12 at the reedbed, 13 at Gallops and 59 at St Edmunds), 47 reached the egg laying stage of which 33 were Blue Tit nests and 14 Great Tit nests, producing 278 and 94 eggs respectively. This was a marked departure from previous years in terms of the relative proportions of the two species using the boxes (see Table 1 and Table 2 below). In the first three years of monitoring (2009-11), there were slightly more Great Tit pairs using the boxes than Blue Tits. However, Blue Tits have been in the lead since 2012 (with the exception of 2015). 2016 had the largest number of Blue Tits using the boxes in the eight years of monitoring with Great Tits, at 14, the lowest. It will be interesting to see whether these results are reflected in the national figures from the BTO. Survival rates (egg to fledging) were above average for both species, at 74.1% for Blue Tits and 64.9% for Great Tits.

Table 1 Species Summary with Survival Rates – Blue Tit

Year	Nest Count	Eggs	Pulli	Fledge	P/E	F/P	F/E
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2009	18	95	55	43	57.9%	78.2%	45.3%
2010	19	132	104	93	78.8%	89.4%	70.5%
2011	20	171	138	119	80.7%	86.2%	69.6%
2012	26	187	90	55	48.1%	61.1%	29.4%
2013	25	170	107	85	62.9%	79.4%	50.0%
2014	29	250	223	219	89.2%	98.2%	87.6%
2015	23	153	60	44	39.2%	73.3%	28.8%
2016	33	278	231	206	83.1%	89.2%	74.1%
Totals:	193	1436	1008	864	70.2%	85.7%	60.2%

Table 2 Species Summary with Survival Rates – Great Tit

Year	Nest Count	Eggs	Pulli	Fledge	P/E	F/P	F/E
2009	22	109	75	75	68.8%	100.0%	68.8%
2010	23	157	94	76	59.9%	80.9%	48.4%
2011	21	170	91	71	53.5%	78.0%	41.8%
2012	23	160	57	36	35.6%	63.2%	22.5%
2013	18	88	38	28	43.2%	73.7%	31.8%
2014	21	168	134	131	79.8%	97.8%	78.0%
2015	27	142	48	29	33.8%	60.4%	20.4%
2016	14	94	69	61	73.4%	88.4%	64.9%
Totals:	169	1088	606	507	55.7%	83.7%	46.6%

P/E = survival rate from eggs to pulli

F/P = survival rate from pulli to fledged young

F/E = survival rate from egg to fledged young

I have been interested to determine the effects of lifting the adults from the nests on the breeding success of the birds. I think that we can gain some useful information on the use of boxes by individual birds if we find out some information regarding the adults using the boxes but this shouldn't be to the detriment of breeding success. For the last two years I have lifted each adult found sitting in the nest of both species. Of the 47 nests which reached the egg laying stage in 2016, eight failed (four Blue Tit nests and four Great Tit nests).

R8 – Blue Tit lifted off three eggs and three newly hatched pulli which were subsequently deserted.

W10 – Blue Tit lifted off 10 eggs – subsequently deserted

9A – Blue Tit lifted off 8 eggs. Five pulli hatched which were later found dead in the nest at FS stage

R5 – Blue Tit lifted off 8 eggs – subsequently deserted

W12 – Great Tit lifted off 3 eggs. One further egg laid and then deserted

W15 – Great Tit lifted off 2 eggs – subsequently deserted

Malc 4 – Great Tit lifted off 6 newly hatched pulli – subsequently deserted

5A – Great Tit lifted off 9 eggs of which only one hatched indicating predation rather than desertion since 7 of the eggs disappeared from the nest.

Six nest failures (three Blue Tit and three Great Tit) were possibly affected by the adult birds being lifted from the nests although there is no evidence to prove this. All six birds were already ringed, were handled just long enough to read the ring and returned immediately to the nest by posting them back through the hole. All settled back onto the nest. 9A and Malc 4 were two of a very small number of nests where the adults were lifted off newly hatched young. This is not something that I would do if I am aware that there are hatched pulli in the nest. A second Great Tit nest fledged seven pulli despite the adult bird being lifted whilst on tiny pulli.

Of the 28 Blue Tit nests where the adult was lifted at the egg stage, 23 went on to fledge with two desertions (7% desertion rate). Of the 12 Great Tit nests where the adult was lifted at the egg incubation stage, 9 fledged young with three desertions (25% desertion rate).

I would like to look at the individual birds that have used the nest boxes this year in terms of age and use of the Fen.

Thanks, as usual, go to Bernard Siddle for his help and company when undertaking the monitoring and for his practical skills in repairing boxes and making new ones.

Carole Davis

(b) Large boxes

Nesting was protracted in 2016 later than the Autumn equinox. Between them, Stock Doves and Barn Owls had eleven chicks in four nests late in September. Most were close to fledging, but the fluffy owlets in one box were so small that their survival was questionable.

After some changes, fourteen boxes were monitored, plus the Pout Hall corner tern raft, where Common Terns fledged three chicks for the fifth consecutive year.

Elsewhere on Burwell Fen, Jackdaws acquired any empty box, personalising it with their odour and sticks aplenty. This habit seems to claim the box for their use year after year, though one was so crammed, the chicks tumbled out long before they were large enough to survive. Another pair lost their chicks similarly, nesting on an open ledge. Eight of the nine Burwell Fen boxes were occupied, successfully fledging 5 Barn Owls, 12 Jackdaws and 2 Stock Doves.

Only one of the two boxes on Oily Hall was used, where a Barn Owl nest was predated. Moving the box to simplify monitoring had inadvertently allowed access by an egg thief of some sort.

Barn Owls returned to the Tubney Fen box for the first time since 2012, raising two chicks successfully before starting their very late brood. Nearby, two Stock Dove nests raised two youngsters each. A single Barn Owl fledged from the new Bog Oak field box whilst there were two broods, each of four chicks, in the Guinea Hall box.

Barn Owls fared well in 2016, recovering some losses suffered last year when only one box held a barn owl nest. Kestrel nests were again notable by their absence, having last used a Burwell Fen box in 2010. However, this has allowed the open-fronted box to be successfully used by Stock Doves.

Neil Lerner

(c) Open nests

This year has once again shown a good range and number of open nests at Wicken Fen, with the usual combination of watching and searching, and monitoring with some successful outcomes. The time spent searching for nests was limited by various factors. Most notable of these was the time spent on the trial year of observing colour-ringed Chiffchaffs, and we are very grateful to the ringers for help with this. Flooded paths restricted some access, and searching on the Guinea Hall 'scrub patch' was hampered by the herd of ponies which with foals are very feisty.

The weather through spring 2016 was variable. The batting opened with northerly winds in March, which may have delayed the arrival of some migrants. April and May were mostly fine and dry (if cool), but June gave a cold wet spell which adversely affected chick growth.

Below are the totals by species, compared to the previous 2 years. Notable by their absence are Swallows and Sylvia warblers.

	2014	2015	2016	Notes for 2016.
Mute Swan	1			
Little Grebe		1	1	Chicks seen near nest.
Moorhen	2	2	1	
Coot	2	2		
Wood Pigeon	8	2	2	
Collared Dove	2	1	2	
Cuckoo		1	1	
Swallow	4	5		
Wren	3	12	4	
Duncock		6	3	1 pullus ringed.
Robin	2	6	2	
Blackbird	6	12	5	
Song Thrush	2	4	2	
Sedge Warbler	1			
Reed Warbler	4	2	1	Cuckoo chick.
Blackcap	5	3		
Whitethroat	2			
Chiffchaff	18	30	21	16 pulli ringed, from 5 nests
Willow Warbler	2	2	*	
Long-Tailed Tit	3	6	2	
Chaffinch	2	3	2	
Goldfinch	2	5	3	

Bullfinch	2	1		
Linnet	10	3	2	
Yellowhammer	1		*	
Reed Bunting	1	4		

Predation was generally lower than last year. A few pulli were ringed, but less than last year, and it is interesting for chiffchaffs during a cold spell that despite good clutch sizes (5-6), most of the broods were of 2-3 chicks which were of good weight, so it seems that it makes sense to give the available food to fewer young with a better chance of fledging, which most of them did.

*) Two nests that I would have loved to add to the total were a Willow Warbler and a Yellowhammer, both feeding young but I couldn't find the actual nest, and gave up for fear of further disturbance or damage. Incidentally, the male Willow Warbler was a 'wiffwaff'.

Ann Beeby

Report on "Constant Effort Sites" netting/monitoring at Wicken Fen 2016

(a) St. Edmunds Fen

	2014			2015			2016		
	Ad	Jv	To	Ad	Jv	To	Ad	Jv	To
Cuckoo								1	1
Kingfisher								1	1
GS Woodpecker			2	2					2
Green Wdpkr		1	1						
Magpie								1	1
Jay	1		1	2	2	4			
Marsh Tit								1	1
Blue Tit		4	24	28	5	11	16	6	4
Great Tit	9	24	33	2	10	12	3	5	8
Cettis	5	2	7	4	2	6	7	3	10
LT Tit	9	24	33	2	13	15	17	8	25
Chiffchaff	12	22	34	15	23	38	15	25	40
Willow Warbler		9	9	4	2	6	3	1	4
Blackcap	13	42	55	24	29	53	20	9	29
Garden Warbler	1		1		2	2	1	2	3
Lesser Wh					2	2			
Whitethroat				1	2	3	1		1
Sedge Warbler	3		3	3	3	6	6	4	10
Reed Warbler	8	13	21	5	21	26	9	24	33
Grasshopper W							1	1	2
Tree Creeper	2	2	4	3	2	5	2	4	6

Wren	8	37	45	12	26	38	13	18	31
Blackbird	9	10	19	12	2	14	5	9	14
Song Thrush	3	3	6	7		7	7	2	9
Robin	3	34	37	8	26	34	17	25	42
Spotted Fly								1	1
Dunnock	6	6	12	5	8	13	6	8	14
Chaffinch	3		3	1	1	2	1		1
Bullfinch	4		4	4	6	10	4	1	5
Goldfinch					1		1		
TOTALS	103	255	358	119	193	313	146	158	304

Summaries 2015 to 2016

Winners: Cetti's adults, Lotti adults, Sedge Warbler all, Robin adults.

Stable: Blue Tit adults, Great Tit adults, Cetti's juvs, Chiffchaff all, Blackcap adults, Reed Warbler all, Robin juvs, Dunnock all, Blackbird all, and Song Thrush all.

Losers: Blue Tit juvs, Lotti juvs, Blackcap juvs, Wren juvs.

Comments: Blue, Great and Long-tailed Tits are always a bit hit and miss depending on catching of flocks in late summer, so the results are not necessarily a reflection of the true state of the population. Sedge Warbler and Song Thrush which have been a bit down on their luck seem to be recovering - if unspectacularly. The losers were all among the juveniles, so was this a poor breeding year or did we simply not catch them? And finally the stability of the numbers for the majority of species is encouraging both if seen as a measure of the population and as a reflection of our technique.

With our new additions in 2016 (Cuckoo, Kingfisher, Magpie, Grasshopper Warbler and Spotted Flycatcher) we now have 30 species on the books.

Given variants of weather conditions and catching fortune the overall catch per annum seems similar enough, however, a slight concern might be that the overall number is declining, albeit only by a little.

Personnel involved: Ann, Andy, Carole, Chris T, Chris Q, Dan, Filipa, Gareth, Hannah, James, Jo B, Jo J, Mark, Neil and Peter (hopefully that is everyone).

Sometimes it seems a struggle, especially for the 3.00am starts, but when you see the results it seems worth it.

Peter Bircham

(b) Reedbed

All our sessions were satisfactorily completed again this year. Very many thanks to all those who participated through the summer: Carole, Caroline, ChrisQ, Gareth, Hannah, JoJ, James, Ken, Neil, Robin and Sophie. And in particular to the subsets of

the above who ran sessions as RICs, and/or provided essential support with net-erection and ride-management.

This year we caught 376 different individual birds (148 adults, and 228 juveniles) in 459 captures from 162 metres of net open for eight hours over twelve sessions. This is isn't far off the average of our previous five years – of 318 individuals.

A Magpie and two late roost-exiting Swallows were the only new species caught, out of a total 24 different species, which is the same as in 2015. Apart from the very scarce casual species recorded during the previous four years, it was unusual to catch no Whitethroats or Lesser Whitethroats.

The main reason for the better overall numbers was that this was a more normal year for intercepted tit flocks, which always pull in additional Treecreepers, Long-tailed Tits, Chiffchaff and Willow Warblers.

As usual, only ten species feature in sufficient numbers to enable some sort of meaningful year-on-year comparison: six residents; the two sub-Saharan *Acrocephalus* warblers; and the two short-range, 'Mediterranean' migrants Blackcap and Chiffchaff (the latter to some extent subject to the tit-flock effect as above).

In the table below, the arrows indicate the 2016 variation from the mean of the five years 2011–15. A single arrow indicates >20%; two arrows >50%; and three arrows >100%.

	Adults							Juveniles						
	2011	2012	2013	2014	2015	2016		2011	2012	2013	2014	2015	2016	
Wren	4	7	2	10	5	8	↑	13	11	12	21	11	14	→
Dunnoch		5	4	4	5	6	↑↑	4	1	3	8	2	4	→
Robin		1	2	8		4	↑↑	13	12	15	20	23	26	↑↑
Blackbird	6		1	5	5	4	→	2		2	3	3	5	↑↑↑
Cetti's Warbler	4	3	2	3	4	4	↑	5	2	2	3	8	11	↑↑↑
Sedge Warbler	32	9	12	11	8	12	→	28	9	15	3	7	4	↓↓
Reed Warbler	70	60	41	35	39	56	→	76	47	39	17	25	51	↑
Blackcap	12	18	11	16	18	14	→	32	10	12	26	26	13	↓
Chiffchaff	4	8	4	12	4	5	↓	21	11	9	40	13	29	↑↑
Bullfinch	6	5	5	9	8	3	↓↓	1	3	1	9	3	5	↑
All species	169	137	109	153	114	116	-15%	246	136	136	254	138	162	-11%

Cetti's Warbler showed continuing improvement, with good productivity across this and the other Reedbed sites (28 juveniles ringed in total). Both Reed and particularly Sedge Warblers remained at significantly lower levels than in 2011–12.

Michael Holdsworth