

COMMON BIRDS CENSUS AT ROSTHERNE MERE NNR 2019

Following the mini-reshuffle in surveyors and areas surveyed between 2017 and 2018, 2019 was a settled year. Generally speaking the same surveyors surveyed the same areas except that Martin Steele joined the team and helped in seven visits to Mere Covert. Full details of who did what can be found in 'Census Visit Data 2019' below.

Excepting 2001, when Foot & Mouth disease access restrictions applied, Harpers Bank Wood, Mere Covert and Wood Bongs have been surveyed in every year since 1976 while the run of surveys in Shaw Green Willows began in 1977. The mere end of Long Pasture has been surveyed each year from 2013.

Figures given in the Results table for 1976-2018 refer to Harpers, Mere Covert, Shaw Green (not including Long Pasture) and Wood Bongs. Throughout this CBC Report, unless stated, information and comparisons relate solely to the areas surveyed in 2019. The ten-year averages usually (2010-2019 & 1999-2009), where given, relate to all the areas surveyed in 2019 but do not include results from the foot of Long Pasture.

The 2019 results of the survey are based on a total of 39 visits, 10 from each plot except Harpers (nine). The number of visits to each survey area has scarcely varied over at least the last ten years. Details of weather conditions were noted for each of the visits. Conditions were predominantly bright, clear or sunny on 12 visits and on a further six visits there were at least some sunny periods (totals 15 & 10 in 2018, 12 & 11 in 2017, 17 & 8 in 2016, 17 & 6 in 2015, 11 & 8 in 2014). Generally cloudy conditions prevailed on 21 visits and rain fell on eight of these (totals 14 including 3 in 2018, 17 incl. 6 in 2017, 15 incl. 6 in 2016, 17 incl. 9 in 2015, 21 incl. 9 in 2014). Happily, foggy conditions were again not encountered. Windy conditions were noted on six of the 39 visits (4 in 2018, 7 in 2017, 4 in 2016, 5 in 2015, 4 in 2014) and just one visit was made in what were described, or indicated by thermometer readings (5 degrees C or less), as cold conditions (3 in 2018 and 2017, 5 in 2016 & 2015, 6 in 2014).

The continuing use of broken or unbroken lines to indicate the registration of a different or the same singing bird remains of primary importance in CBC-type survey fieldwork. It may help fieldworkers if, each time they record a singing bird, they listen for a bird of the same species singing nearby and, if so, record a broken line between the two birds concerned.

2019 Results - Summary

From 2014 to 2017 this summary has included a number of references to the annual Preliminary Report of results of the BTO Constant Effort Survey to give some national context to the Rostherne CBC-type survey. That Report wasn't available at the time of preparing the Rostherne 2018 Report so the results of the national Breeding Bird Survey (BBS) for 2018 were used for comparison instead. However, the Preliminary CES 2019 Report is available at the time of writing <https://www.bto.org/our-science/projects/ringing-scheme/ringing-surveys/constant-effort-sites/ces-results/preliminary-0> and I have referred to it below. The CES Report measures changes in adult abundance compared to the 2014-2018 average. CES sites had another generally mild winter, but with periods of frost and snowfall in late Jan and early Feb. Overall, spring was generally warmer than average. The CES covers 24 woodland, scrub and reedbed species.

Waterbirds are not targeted by this survey but the *Mandarin* recorded in Shaw Green is worthy of mention as only the second ever appearance of the species – the first being in Old Hall Wood in 2004.

Pheasants were again recorded in all four areas, the total of seven territories plotted equals the highest ever total in the areas surveyed.

As in 2018 *Sparrowhawk* was not recorded during survey work. *Buzzard* however was recorded in or over all four areas but no nests were found or territories plotted.

Three *Stock Dove* territories were plotted in Harpers and there were registrations in Mere Covert, Shaw Green and Long Pasture. Three territories actually equals the highest total recorded in all four main areas.

Woodpigeon is generally not well covered by the survey but birds were nevertheless noted in all four areas and a territory was plotted in Harpers.

Cuckoo territories were held on the Reserve annually until 1997 and in most years until 2008 but since then the only registration was in Wood Bongs in 2017.

The only *Tawny Owl* was noted in Mere Covert on just one date. The status of this species on the Reserve appears to be not well known.

Not only was the first *Lesser Spotted Woodpecker* territory plotted since 2009, but the Mere Covert nest successfully fledged young. 2019 was only the fifth year since 2009 with any registrations of the species. Registrations in Long Pasture and Shaw Green are thought to refer to the Mere Covert birds.

After a record-equalling year in 2018 the number of *Great Spotted Woodpecker* territories slumped to just two – one each in Harpers and Wood Bongs, but with not enough registrations to plot territories in the other two areas. This is the lowest total since 2000. Given the known competition for nest sites between this and the previous species and predation by Great on Lesser it is tempting to speculate that the apparent relative lack of Greats this year may have played a part in the successful breeding of Lesser. The number of Great territories from 2009 (the last year a Lesser territory was plotted) to 2018 varied from four to six.

Green Woodpecker was not recorded during survey work in 2019, Wood Bongs hosted a territory in 2018 and is the only area of the Reserve to hold a territory this century – albeit less than annually.

As in 2018 *Kestrel* was not recorded during survey work.

Jays, apparently roaming birds, were recorded in all four areas, *Magpies* were recorded in all areas except Mere Covert and *Jackdaws* in Mere Covert and Shaw Green, but no territories were plotted.

Carrion Crow was recorded in only Harpers and in Wood Bongs where a nest was found. This is the poorest showing since 2015.

Two *Coal Tit* territories were plotted, one in both Mere Covert and Wood Bongs, there were insufficient registrations to plot territories in the other two areas. Two territories were plotted in 2018. The population on the Reserve remains at a low ebb, the ten-year averages to 2019 and 2009 are 2.8 and 4.4 respectively.

26 *Blue Tit* territories were plotted in the four areas surveyed, down from 27 in both 2017 and 2018. Numbers in Wood Bongs and Shaw Green were, respectively, the same or similar to last year. However, numbers in Mere Covert rose by three territories while Harpers declined by the same number. The ten-year averages to 1988, 1998, 2009 and 2019 stand at 18, 35.4, 30.7 and 28.6 respectively, thus showing considerable variability. The average taken over the whole period of the Survey however stands at 27.69 territories. On the CES Blue tit adult numbers showed a significant 12.9 % increase in abundance not reflected on our survey.

As in 2018 the number of *Great Tit* territories total is 13 – with 2012, the lowest in the areas surveyed since 1994; an additional territory was plotted in Long Pasture. The number of territories in each area were the same or very similar to 2018. The ten-year averages to 2019 and 2009 are 17.2 and 24.4 while the average over the whole survey period is 17.24. On the CES Great Tit adult numbers showed a significant 14.5% increase which, like the CES Blue Tit increase, is not reflected on our survey.

Cetti's Warbler made its more than welcome debut on the survey with a territory plotted in Long Pasture and two registrations in Shaw Green. Cetti's has of course already bred on the Reserve.

As in 2018 four *Long-tailed Tit* territories were plotted, plus one at the foot of Long Pasture. These results maintain the stable population indicated in the years from 2015 when four or five territories were plotted annually. The average from 1999-2019 is 3.25, whereas the average for the ten years to 1998 is 7.2. On the CES Long-tailed Tit adult numbers showed a significant 25.7% increase which is certainly not reflected on our survey.

Three *Willow Warbler* territories were plotted in the four main areas as in each year from 2016, but no territory was held at the foot of Long Pasture where there has been one in most years from 2013. The ten-year average to 2019 is 1.8. Four birds sang in Harpers on Apr 15th but only single birds sang on later survey visits there. The CES reported a not significant 1.2% decrease suggesting the status quo, a finding mirrored at Rostherne.

After two years of record high numbers for *Chiffchaff* in 2016 and 2017 (21 and 22 respectively) numbers fell back to 17 last year. This year a new record total of 23 was set, plus one on Long Pasture. The number of territories increased in each of the four main areas. The ten-year averages to 2019 and 2009 are 15.8 and 10.5 respectively while the average over the whole survey period is 11.83. The CES reported that Chiffchaff was one of two short-distance migrants "encountered in particularly high numbers relative to the five-year mean" and it registered a significant 10.4% increase. It is worth noting that the Rostherne five-year mean is 17 territories.

The number of *Sedge Warbler* territories was at a very low ebb in 2017 and 2018 with three and two respectively – two being the equal lowest since 1998. The 2019 survey showed a marked increase to five, all in Shaw Green, but still below the ten-year average to 2019 of 6.1. A further territory was plotted at the foot of Long Pasture. The CES showed a significant 15.4% decrease in adult numbers, not reflected in the Rostherne CBC-type survey result. Perhaps the number present on the Reserve has more to do with the amount of available habitat.

2019 was another blank year for *Grasshopper Warbler* following a territory being held in Shaw Green in 2017. Gropper only rarely appears on the CBC-type survey. Other than in 2017 birds were recorded in Shaw Green in 2004, when a territory was plotted, and in 2010 when there were insufficient registrations; a bird was in Long Pasture in 2015 but no territory could be plotted.

Blackcap had such an exceptional year on the Rostherne survey that I re-checked all the territories I had plotted. 40 territories in the four main areas compares with the previous highest total of 28 in 1993 and 2018. A further territory was plotted in Long Pasture. Territory numbers increased in all four main areas with particularly large increases in Harpers and Mere Covert. The ten-year average to 2019 is 22.4 while the 'all years' average is 17.95. The CES reported that Blackcap was the other short-distance migrant "encountered in particularly high numbers relative to the five-year mean" and it registered a significant 44.9% increase. The number of adults encountered was the highest since CES monitoring began in 1983. The CES Report states "Survival rates were also the highest on record suggesting that conditions were good on their wintering grounds over the 2018/19 winter". It is worth noting that the Rostherne five-year mean is 22.6 territories. It is satisfying to note the co-relation between national and Rostherne results.

As in 2018 there were no *Garden Warbler* registrations in 2019. A brief review of the fortunes of the species on the Reserve and nationally was included in the 2018 CBC-type Survey Report.

There were no *Lesser Whitethroat* registrations again this year. A territory was last plotted on the Reserve in 2014 in Mere Meadow, an area not surveyed since then.

The only 2018 *Whitethroat* territory was plotted in Long Pasture. There were no registrations there this year but two territories were plotted in Shaw Green. This was the best showing since 2014 when Shaw Green held three territories. This species has been of unpredictable presence on the Reserve over the years with a maximum of three territories in the areas presently surveyed. Whitethroat was the only long-distance migrant singled out by the CES Report as returning in particularly high numbers relative to the five-year mean. Numbers showed a significant 16.6% increase. Given that the Rostherne sample is so small it is difficult to say with confidence that our result mirrors the national one but at least both results are in the same direction!

Goldcrest was the second species I re-checked having been so surprised by the number of registrations. The 12 territories plotted set a new record, easily surpassing the previous best of nine in 2008 and far in excess of the three in 2018. It was notable that the five territories in Mere Covert and Harpers were fairly widespread through both areas. The ten-year averages to 2019 and 2009 are 3.3 and 6.1 respectively; the all-time average is 3.3. Unfortunately Goldcrest is not covered by the CES survey but it might be instructive to check how it fared when the 2019 BBS Report is published.

Wren territories made a partial recovery increasing to 66 from 62 in 2018; there were 71 in 2017. Long Pasture had one territory in all three years. Compared to 2018 there were increases particularly in Mere Covert and Wood Bongs, but the decrease noted in Harpers in 2018 continued and the 12 territories plotted there is the lowest since 2008, also 12. The ten-year averages to 2019 and 2009 are 69 and 66 respectively; the all-time average is 57.95. In the CES Report *Wren* showed a non-significant decrease of 4.1%.

Although distributed rather differently between the three main areas of woodland, the six *Nuthatch* territories was the same total found in six of the last ten years. The increasing, then stabilising, ten-year averages to 1988, 1998, 2009 and 2019 - 1.6, 2.7, 7 and 6.4 respectively are interesting. Perhaps they suggest that the range expansion in North Cheshire, described in 'Birds in Cheshire and Wirral' (Norman D, 2008) has peaked on the Reserve. *Nuthatch* is not covered by the CES Report.

The total *Treecreeper* territories was down to four from five in 2018. Although birds were recorded in Mere Covert, as in 2018, there were insufficient registrations to plot a territory there. The ten-year averages to 2019 and 2009 are 5.3 and 7.5 respectively. *Treecreeper* showed a significant increase in abundance on the CES, possibly benefitting from the mild winter, but this was not reflected in the Rostherne survey.

Just a note in memoriam of *Starling*, 30 years ago there were nine territories in Mere Covert and six in Wood Bongs. There were two territories in Mere Covert in 2002 but none on the Reserve since.

Since reaching a high point of 34 in 2016, the number of *Blackbird* territories fell for the third year, down to 21; Long Pasture held a territory as it did each year from 2016. Both Mere Covert and Harpers lost three territories while Wood Bongs gained three. The ten-year averages to 1988, 1998, 2009 and 2019 are 16.9, 21, 16.7 and 22.8 and put the 2018 results into perspective. *Blackbird* showed a significant 18.8% decrease in the CES Report where it is pointed out that the species also shows a long-term trend of decline. Fewer *Blackbirds* were recorded than in any year since CES began.

Song Thrush territories have declined a little since their record high of 12 in 2016 and reduced to nine in 2019. There were no registrations on Long Pasture following the first territory plotted there last year. Ten-year averages to 2019 and 2009 are 7.6 and 4.8 respectively. The 2019 total of nine territories is only surpassed in five years since 1976. The CES Report shows a not significant decrease of 7.8%.

Always an uncommon breeding bird on the Reserve, *Mistle Thrush* made a particularly poor showing in 2019 with registrations only in Wood Bongs but insufficient to qualify for a territory.

A *Spotted Flycatcher* territory was plotted in Wood Bongs for the third year running – this after a gap since 1989 with no territories plotted. Away from Wood Bongs the last registrations were in 2015 in Mere Covert. *Spotted Flycatcher* is not covered by CES.

Increases in *Robin* territories, mainly small, in all four main areas resulted in 41 territories being plotted. This reversed the decline of the previous two years and is the highest total since 53 in 2009. In addition, Long Pasture has hosted a territory in each year from 2016. The ten-year averages to 1988, 1998, 2009 and 2019 are 18.5, 30.8, 46.1 and 31.1. *Robin* showed a significant decrease on the CES of 15% - not reflected at Rostherne.

A *House Sparrow* sang at the southern edge of Wood Bongs on May 9th, a very rare event on the Reserve - presumably a bird wandering from the village.

With just three territories plotted compared with two in 2018, *Dunnock* remains at a very low ebb on the Reserve. For the second year running there were no registrations in Mere Covert and Harpers and none on Long Pasture where a territory was held in 2017 and 2018. The most positive thing that can be said is that the three territories plotted keeps the numbers very slightly ahead of the ten-year average to 2019 which is 2.9. Ten-year averages to 1988, 1998 and 2009 are 11.3, 18 and 9.1. *Dunnock* showed a significant 22.6% decline on the CES and this decline is reported to be long-term. Against that background prospects for an increasing population at Rostherne may be slim.

The small increase in the number of *Chaffinch* territories noted last year was improved on this year and the total of 18 is the highest since 2016 when 20 were plotted. Long Pasture held an additional territory. The result is better than the ten-year average to 2019 which is 15.5. Ten-year averages to 1988, 1998 and 2009 are 25.2, 36.3 and 28. There was a significant 40.8% decline on CES with fewer birds being recorded than in any previous year.

Bullfinch was recorded during survey work in two areas – Shaw Green Willows and Wood Bongs. There were insufficient registrations to plot a territory in either. The last territory plotted in one of the present survey areas was in Mere Covert in 1995.

Greenfinch was recorded during survey work for the first time in these areas since 2011, although this was just a single registration in Mere Covert on Apr 6th.

A *Goldfinch* territory was plotted at the foot of Long Pasture, otherwise, as last year, birds were recorded in Wood Bongs and Shaw Green, but it was not possible to plot any territories there. The last territory plotted in one of the present main survey areas was in Wood Bongs in 2008.

The total of nine *Reed Bunting* territories improved slightly on last year's eight, which was itself the best since ten were plotted in 2013; two more were plotted at the foot of Long Pasture as last year. Eight territories were in Shaw Green and is the largest number there since eight in 2012. The other territory was in Mere Covert. Ten-year averages to 2019 and 2009 in all the areas surveyed throughout those periods are 7.9 and 8.9 respectively. The CES showed a significant 15.8% decline and the species shows a long-term decline as numbers fell to the second lowest on record in 2019.

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RESULTS

The tables which follow present the results of CBC-type survey fieldwork in 2019. It will be noted that for several species figures appear in parentheses in the column of results from Shaw Green Willows. These relate to the additional number of territories plotted in the most westerly part of Long Pasture. These results also appear in parentheses in the 'Year Total' column. The purpose of the parentheses is to allow for like-by-like comparisons of results with past years. The report "Common Birds Census at Rostherne Mere NNR 1976-1983" (Sellwood and Wall, 1984) should be referred to for background information and that report highlights the limits of this census method. The results for 2019 have been arrived at in the way outlined in that report.

Survey work in 2019 was carried out by Steve Collins, Phil Dell, Judith Halman, Sheelagh Halsey, Ted Lock, Martin Steele and Tony Usher, while Bill Bellamy stood in for Sheelagh on three visits to Shaw Green. The initials of all the recorders appear in the Census Visit Data Tables which follow. The species map analyst, Steve Barber, would like to thank Bill, Steve and Phil for producing the sets of species maps from the original visit maps.

In the table of results the following symbols are used:

- r = species recorded but probably not holding territory
- nc = no count: species probably holding territory but no proper assessment was possible from the registrations made
- n = adjacent to the assessed number, indicates the figure was based entirely on a count of active nests
- a blank = this species not recorded during census visits

Aquatic species have been included in the results table but see the systematic list for full breeding season details. Coverage of Pheasant, Stock Dove and Woodpigeon appears to have been uneven but registrations have been analysed and results appear in the tables below. Reed Warbler continues to be studied separately.

In the results table for species with a total of ten or more territories in any year from 1990 the range of territories from 1976-2018 is also given.

CENSUS VISIT DATA 2019

	Mere Covert	Harpers Bank Wood	Wood Bongs	Shaw Green Willows
No of visits	10	9	10	10
Duration	20 hrs	19 hrs 25 mins	20 hrs 35 mins	17 hrs 20 mins
First visit	1 Apr	1 Apr	5 Apr	31 Mar
Last visit	6 Jun	27 May	5 Jun	5 Jun
Recorder	PD & MS (5) PD, MS & TL (2) PD (2) PD & TL (1)	JH & ACU (8) ACU (1)	SC (10)	SH (7) BB (3)
Species map preparation	PD	BB	SC	BB
Species map analysis	SB	SB	SB	SB

RESULTS 2019

	Mere Covert	Harpers Bank Wood	Wood Bongs	Shaw Green Willows	Year Total	Range 1976-2018
Canada Goose				r	r	
Mandarin				r	r	
Mallard		r		r	r	
Pheasant	r	4	3	nc	7	
Buzzard	r	r	r	r	r	
Moorhen		r			r	
Stock Dove	r	3		r	3	
Woodpigeon	r	1	r	r	1	
Tawny Owl	r				r	
Lesser Spotted Woodpecker	1			r (r)	1	
Great Spotted Woodpecker	r	1	1	r	2	
Jay	r	r	r	r	r	
Magpie		r	r	r	r	
Jackdaw	r			r	r	
Carrion Crow		r	1n	r	1n	
Coal Tit	1	nc	1	r	2	
Blue Tit	9	6	8	3 (1)	26 (1)	13-41
Great Tit	5	3	4	1 (1)	13 (1)	7-31
Cetti's Warbler				nc (1)	1	
Long-tailed Tit	nc	2	1	1 (1)	4 (1)	0-11
Willow Warbler	1	1	r	1	3	0-41
Chiffchaff	9	7	4	3 (1)	23 (1)	4-22
Sedge Warbler				5 (1)	5 (1)	0-9
Blackcap	18	10	9	3 (1)	40 (1)	6-28
Whitethroat				2	2	
Goldcrest	5	5	2		12	0-9
Wren	26	12	18	10 (1)	66 (1)	24-84
Nuthatch	1	2	3		6	0-10
Treecreeper	r	2	1	1	4	1-11
Blackbird	5	5	9	2 (1)	21 (1)	9-38
Song Thrush	3	2	2	2	9	0-12
Mistle Thrush			r		r	
Spotted Flycatcher			1		1	

	Mere Covert	Harpers Bank Wood	Wood Bongs	Shaw Green Willows	Year Total	Range 1976-2018
Robin	10	11	17	3 (1)	41 (1)	10-56
House Sparrow			r		r	
Dunnoch			1	2	3	1-24
Chaffinch	6	3	8	1 (1)	18 (1)	6-41
Bullfinch			r	r (r)	r	
Greenfinch	r				r	
Goldfinch			r	r (1)	(1)	
Reed Bunting	1		r	8 (2)	9 (2)	2-18