**COMMON BIRDS CENSUS AT ROSTHERNE MERE NNR 2018**

2017 was a settled year for both surveyors and the areas surveyed. However, lack of free time meant that Bill Bellamy was unable to take on a survey area in 2018. This resulted in a mini-reshuffle and the welcome addition of three new surveyors, all of whom are experienced local birders. Phil Dell moved from Harpers Bank Wood to Mere Covert where he was assisted on several visits by Ted Lock. Judith Halman and Tony Usher took over from Phil in Harpers where they were welcomed on their first visit by constant rain, fortunately weather conditions did improve for them during the survey season! Steve Collins and Sheelagh Halsey continued to survey Wood Bongs and Shaw Green Willows respectively. Bill’s involvement in the survey continued however, as in addition to standing in for Sheelagh on two visits and assisting Phil on one visit, he prepared the species registrations maps for Harpers and Shaw Green, while the species maps for Mere Covert and Wood Bongs were prepared by Phil Dell and Steve Collins respectively.

Excepting 2001, when Foot & Mouth disease access restrictions applied, Harpers, Mere Covert and Wood Bongs have been surveyed in every year since 1976 while the run of surveys in Shaw Green began in 1977. Gale Bog was not surveyed in 2018 thus breaking a run of survey years there stretching from 1993 to 2017.

Figures given in the Results table for 1976-2017 refer to Harpers Bank, 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 2018. The ten-year averages (2009-2018 & 1998-2008), where given, relate to all the areas surveyed in 2018 but do not include results from the foot of Long Pasture.

The 2018 results of the survey are based on a total of 39 visits, 10 from each plot except Mere Covert (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 15 visits and on a further 10 visits there were at least some sunny periods (totals 12 & 11 in 2017, 17 & 8 in 2016, 17 & 6 in 2015, 11 & 8 in 2014, 23 & 2 in 2013). Generally cloudy conditions prevailed on 14 visits and rain fell on three of these (totals 17 including 6 in 2017, 15 incl. 6 in 2016, 17 incl. 9 in 2015, 21 incl. 9 in 2014, 15 incl. 9 in 2013). Happily, foggy conditions were again not encountered. Windy conditions were noted on four of the 39 visits (7 in 2017, 4 in 2016, 5 in 2015, 4 in 2014, 6 in 2013) and three of the visits were made in what were described, or indicated by thermometer readings (5 degrees C or less), as cold conditions (3 in 2017, 5 in 2016 & 2015, 6 in 2014, 12 in 2013).

It is considered that no habitat management work took place between the 2017 and 2018 seasons which might have impacted survey results. It should be noted that rhododendron clearance work in Wood Bongs continued in 2016 and there was very little left there by the year end. Habitat management work in earlier years included the clearance of part of Gale Bog in early 2015, the removal of rhododendron in parts of Mere Covert in 2011 and 2012 and the extensive clearance of willow scrub undertaken in Shaw Green prior to the 2013 breeding season.

***My comments in recent Reports regarding the use of broken and unbroken lines on CBC visit maps still stand. I repeat: as I worked on plotting the number of territories from species maps I again became aware of a lack of the use of broken and unbroken lines on the maps for some species in some areas. These lines indicate whether registrations on the map refer respectively to the same or a different individual bird. They are very important when it comes to plotting territories and a species map with few of these lines is likely to result in a less accurate total of territories, particularly where registrations are made of birds within yards of one another without any indication of whether the same bird is responsible for the registrations. Please make full use of dotted and unbroken lines on the visit maps.***

**2018 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 national context to the Rostherne CBC survey. Unfortunately, at the time of writing, the CES Report for 2018 is not available. However, the report of the Breeding Bird Survey (BBS) for 2018 is available <https://www.bto.org/sites/default/files/bbs-report-2018.pdf> and has been used in the same way. Please bear in mind that any comparisons are between the results of our CBC-type survey and the results achieved by the BBS, which began in 1994, – a different type of survey. The differences between the two surveys were discussed in the Rostherne Natural History Report 2003.

*Pheasants* were recorded in all four survey areas but only two territories were plotted compared with seven last year. Given the enormous numbers released annually in the UK this reduction is unlikely to be of anything other than very local significance.

 Neither *Sparrowhawk* or *Kestrel* was recorded during survey work; *Buzzard* was recorded in all three areas of woodland but, unlike 2016 when two nests were found in Mere Covert, none were found this year.

 *Water Rail* was recorded in Shaw Green for the third year running, but again a combination of location and insufficient registrations meant that no territory could be plotted. No registrations were made after May 1st, an indication perhaps that bird(s) had left the area.

 Given the scarcity of *Lapwings* on the Reserve it is worth noting that Lapwing was recorded above Mere Meadow/Mere Field on three survey visits to May 7th.

 A single *Stock Dove* territory was plotted in Mere Covert and the species was also recorded in Harpers Bank. Outside the survey areas a nest was found on Mere Field. This showing is similar to that of recent years.

 Although found to be present in the three main areas of woodland, coverage of *Woodpigeon* again appears to have been incomplete. Nevertheless, a nest was found in Wood Bongs.

 The single appearance of a *Cuckoo* in a survey area last year – the first since 2008 - was taken as a hopeful sign; however there were no records during survey work in 2018.

 As in the two previous years there was just a single registration of *Tawny Owl*, this year’s was in Mere Covert as opposed to Wood Bongs.

 Last year’s single appearance of *Kingfisher* was only the second ever during a survey visit, this was followed by a sighting during a visit to Harpers Bank in 2018.

 Over the years Wood Bongs has been by far the most favoured area for *Green Woodpecker* and recently held a territory in five of the years 2010 – 2015 but not in the following two years. However a territory was plotted there this year and, as a bonus, juveniles were noted in a nest.

 Six *Great Spotted Woodpecker* territories in the three main areas of woodland equalled the best showing in these areas - in 2013 and 2016; also recorded in Shaw Green.

 That *Lesser Spotted Woodpecker* was recorded during two visits to Mere Covert is encouraging, given that birds were previously recorded during survey work in just three years since 2009, when a territory was last plotted (in Harpers Bank). A bird was also seen in flight over Long Pasture on April 8th.

 *Jay* and *Magpie* were recorded in all three main areas of woodland and Jackdaw in Harpers Bank and Mere Covert but, as usual, registrations were insufficient to plot any territories.

 Three *Carrion Crow* nests were found in Mere Covert and one in Harpers Bank – the best showing in the areas surveyed since 1989 when eight were located – six in Mere Covert and two in Harpers Bank.

 The three *Goldcrest* territories plotted compares with four last year, which was the best showing since a Reserve record total of nine in 2008. The ten-year ranges to 2018 and 2008 is one to four and four to nine respectively. BBS results for England showed a large and significant decline compared with 2017. The BBS Report considered that this could be due to the effects on this, the smallest of our resident species, of the spell of fierce winter weather (Beast from the East) in late February/early March. However the Rostherne population seems to have been relatively unaffected.

 After two years of reductions the number of *Blue Tit* territories stabilised at 27 – the same number as last year. The results were somewhat contradictory with increases in three areas compensating for a sizeable reduction in Mere Covert. The ten year averages to 2018 and 2008 are 28 and 32.5 respectively. The BBS results for England showed a significant gain of 12% on 2017.

 The total of 13 *Great Tit* territories is, with 2012, the lowest in the areas surveyed since 1994. As with Blue Tit there are contradictory results with reductions in Mere Covert and Shaw Green compared with increases in the other two areas. The ten year averages to 2018 and 2008 are 18 and 24.6 respectively. The BBS results for England showed a significant gain of 17% on 2017.

 *Coal Tit* registrations allowed only two territories to be plotted – both in Wood Bongs; registrations in the three other areas were insufficient to enable territories to be plotted. The total of two is down from four last year but equals the two plotted each year 2013-2015. The ten year averages to 2018 and 2008 are 2.9 and 4.5 respectively.

 The four *Long-tailed* Tit territories plotted, plus the one at the foot of Long Pasture, is similar to the previous three years, suggesting an improved and stable population compared to 2012 to 2014, when there were either none or one territory. The long-term average 1998-2018 is 3.35 territories. This is one of those small, resident species which suffered a large, significant decline on the BBS in England possibly due to the effects of the Beast from the East. As with Goldcrest this is not reflected in the Rostherne results.

 After two years of record high numbers of *Chiffchaff* territories there was a fall this year from 22 in 2017 to 17. There were reductions in all areas except for Harpers Bank where there was an increase. The ten year averages to 2018 and 2008 are 14.5 and 10.3 respectively. A territory has been held at the mere end of Long Pasture in each year from 2015. BBS results for England show a significant decline of 30% on 2017.

 Single *Willow Warbler* territories were plotted in Harpers Bank, Shaw Green, Wood Bongs and at the foot of Long Pasture, giving the same total as in the last two years; song was recorded on two dates in Mere Covert but this was insufficient to qualify for a territory. 2018 was the 42nd year in which this CBC-type survey has been carried out. Over the first 21 years (to 1996) the average number of Willow Warbler territories was 14.5 with a range from 1 – 41, in the second 21 years the average was 1.9 with a range of 1 – 4. The BBS shows interesting short and long-term trends for Willow Warbler. Results for England show a significant 30% decline on those from 2017, not reflected at Rostherne. Long-term English results show a significant 44% decline 1995-2017, whereas the results for the North West England region (within which Cheshire falls) show a stable situation over that period. The long-term Rostherne results seem to reflect this pattern.

 The number of *Blackcap* territories rose for the second year, from 24 in 2017 to 28 this year, equalling the best ever total for these areas reached in 1993; a single territory was again plotted in Long Pasture. The ten year averages to 2018 and 2008 are 19.9 and 15.7 respectively. BBS results for England show a significant gain of 7% on 2017.

 As last year there were no registrations of *Garden Warbler* in the three main areas of woodland, or in Shaw Green. Even the foot of Long Pasture, where there was a territory in 2016 and 2017, was deserted this year. Otherwise the last territory plotted was in Mere Covert in 2010. Garden Warblers held territory in almost every one of the first 21 of the 42 years of CBC-type surveys at Rostherne with a range of 0 – 8 territories and an average of 2.9 per year. The second 21 years have been a different story with no territories being plotted in 11 years, a range of 0 – 2 and an average of 0.5 per annum. BBS trends for England 1995-2017 show a significant 31% decline. It is not surprising that surveyors have been struggling to find this species on the Reserve.

 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 *Whitethroat* territory was plotted at the foot of Long Pasture where there was also a territory last year. There were no registrations in Shaw Green where up to three territories have been held in most years this century.

 2018 was a blank year for *Grasshopper Warbler* after last year when the single territory plotted in Shaw Green was only the third ever plotted on the Reserve – the others being in 2004 and 2010 in the same area.

 Following a marked drop in numbers in 2017, *Sedge Warbler* suffered a further decrease this year with just two territories plotted. Both the territories were in Shaw Green which is much the favoured area of this species, although in the first half of the present decade territories were also held at the foot of Long Pasture and along the bottom of Mere Covert. The ten year averages to 2018 and 2008 are 6.1 and 5.5 respectively. Two territories is the poorest showing since two in 1998. BBS English trends in 2017 were fairly neutral compared to 2016, but the 2018 results show a significant 30% decline compared to 2017. The Waterways Breeding Bird Survey section of the BBS Report shows a 42% decline from 2007 to 2017, compared to an 18% decline on the BBS which covers all habitat types. The Report goes on to attribute annual fluctuations in UK trends to overwinter survival, but it seems apparent that, overall, the population is in decline and it will be interesting to see what happens to the small Rostherne population in years to come.

 *Nuthatch* territories in the three main areas of woodland reversed last year’s showing in that they reduced from eight to six. The ten year averages to 2018 and 2008 are 6.5 and 6.8 respectively. However, BBS results for England show a significant 25% gain on 2017.

 Five *Treecreeper* territories was a slight increase from the four in 2017. Although recorded in Mere Covert for the first time since 1989 there were insufficient registrations to qualify for a territory there. The ten year average to 2018 is 5.5 territories.

 The total of 62 *Wren* territories compares with 71 in 2017 and 10-year averages to 2018 of 70 and to 2008 of 64. The reduction is due mainly to a large decrease in Harpers Bank which wasn’t offset by smaller increases in Mere Covert and Wood Bongs. As in 2017 there was a single territory at the foot of Long Pasture. BBS trends for England show a significant 18% decline from 2017.

 After reaching a high point of 34 territories in 2016, bettered only by 38 in 1977, the total of *Blackbird* territories reduced from 28 last year to 24 in 2018. The reduction from 2017 is mainly due to fewer territories being plotted in Mere Covert. The ten year averages to 2018 and 2008 are 22.3 and 16.9 respectively. As in 2017 Long Pasture held a single territory. BBS trends for England show a significant 5% decline from 2017.

 The number of *Song Thrush* territories showed a slight variability from survey plot to plot compared with last year but the overall territories remained the same at ten. An additional territory on Long Pasture was the first recorded there. The ten year averages for the same areas to 2018 and 2008 are 7.5 and 4.4 respectively. The BBS trend for England shows a significant 26% gain 1995-2017.

 *Mistle Thrush* is an uncommon breeding bird on the Reserve and the single territory plotted in Wood Bongs reflects this, as does the fact that the two territories plotted last year is the best showing since 2007.

 For the second year running a *Spotted Flycatcher* territory was plotted in Wood Bongs, the territory was again based on a nest and is only the second territory plotted on the Reserve since 1989 when one was located in Mere Covert.

 Slight reductions in the number of *Robin* territories in three areas are compensated for by an increase in Wood Bongs resulting in 35 territories, the same as last year. The ten year averages for the same areas to 2018 and 2008 are 32.3 and 44.4 respectively. As in 2017 there was a single territory at the foot of Long Pasture. BBS trends for England show a significant 13% decline from 2017 but a significant 32% gain 1995-2017.

 *Dunnock* made a very poor showing in 2018. There were no registrations in either Harpers Bank or Mere Covert and not enough registrations for a territory in Wood Bongs. The two territories in Shaw Green is similar to its status there over the last dozen years. The ten year averages for the same areas to 2018, 2008 and 1997 are 3, 10.1 and 19 respectively! As in 2017 there was a single territory at the foot of Long Pasture. BBS trends for England show a significant 6% decline from 2017 but a significant 16% increase 1995-2017, while the North West region trend shows a significant 23% gain over the same period. Other factors are obviously at play at Rostherne where the number of territories has been in decline since the early years of the 1990s.

 *House Sparrow* is rarely recorded during survey visits on the Reserve and it is assumed that the four birds collecting food in Wood Bongs on May 17th were breeding in the village.

 After slumping to the lowest ever total of six territories in 2014, *Chaffinch* numbers recovered in 2015 (21) and 2016 (20) before reducing to 12 last year. Numbers improved slightly to 14 in 2018. The averages for the ten year periods to 2018 and 2008 are 15.6 and 29.1. BBS trends for England show a small but significant decline of 4% from 2017. The North West England region trend shows a significant decline of 14% over the period 1995-2017. The decline at Rostherne over the same period has been much greater.

 There were no registrations of *Greenfinch* on any of the survey plots for the third year running – the last territory plotted was in the Gale Bog area in 2015.

 *Goldfinches* were recorded in Wood Bongs and Shaw Green but it was not possible to plot any territories. A family party flew over Mere Meadow on June 6th.

 The *Bullfinches* recorded in Harpers Bank and Shaw Green were the first on the survey since 2013 but registrations were insufficient to qualify for a territory.

 The total of eight *Reed Bunting* territories was the best showing since ten in 2013, two more were plotted at the foot of Long Pasture. There were six territories in Shaw Green where ten year averages to 2018 and 2008 are 6.4 and 7.8 respectively. Ten year averages to 2018 and 2008 in all the areas surveyed this year are 7.7 and 9.3 respectively. The BBS trend for England shows a significant 15% decline on 2017 but a significant 39% gain 1995-2017, while over the same period the North West England regional trend is a non-significant 5% gain.

**Steve Barber May 2019**

**COMMON BIRDS CENSUS AT ROSTHERNE MERE NNR 2018**

**RESULTS**

The tables which follow present the results of CBC-type survey fieldwork in 2018. It will be noted that for several species figures appear in parentheses in the table 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 2018 have been arrived at in the way outlined in that report.

Survey work in 2018 was carried out by Steve Collins, Phil Dell, Judith Halman, Sheelagh Halsey, Ted Lock and Tony Usher, while Bill Bellamy stood in for Sheelagh on two visits in Shaw Green and joined Phil on a visit to Mere Covert. The initials of all the recorders appear in the Census Visit Data Tables which follow. The species map analyser, 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 **r**ecorded but probably not holding territory

nc = **n**o **c**ount: 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 **n**ests

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 1976-2017 is also given.

**CENSUS VISIT DATA 2018**

 **Mere Covert Harpers Bank Wood Bongs Shaw Green**

 **Wood Willows**

No of visits 9 10 10 10

Duration 15 hrs 25 mins 23 hrs 30 mins 19 hrs 18 hrs 45 mins

First visit 5 Apr 2 Apr 6 Apr 1 Apr

Last visit 2 Jun 4 Jun 7 Jun 4 Jun

Recorder PD & TL (5) JH & ACU (9) SC SH (8)

 PD (3) ACU (1) BB (2)

 PD & BB (1)

**Species map preparation PD BB SC BB**

**Species map analysis SB SB SB SB**

**RESULTS 2018**

 **Mere Harpers Wood Shaw Year Range**

 **Covert Bank Bongs Green Total 1976-2017**

 **Wood Willows**

Mallard r r r r

Pheasant nc r 1 1 2

Buzzard r r r

Water Rail nc

Moorhen r

 **Mere Harpers Wood Shaw Year Range**

 **Covert Bank Bongs Green Total 1976-2017**

 **Wood Willows**

Stock Dove 1 r 1

Woodpigeon r nc 1n 1n

Tawny Owl r

Kingfisher r

Green Woodpecker 1 1

Great Spotted Woodpecker 2 3 1 r 6

Lesser Spotted Woodpecker r (r)

Magpie r r r

Jay r r r

Jackdaw r r

Carrion Crow 3n r 1n r 4n

Goldcrest 1 1 1 3

Blue Tit 6 9 8 4 (1) 27 (1) 13-41

Great Tit 4 3 5 1 13 7-31

Coal Tit r nc 2 r 2

Long-tailed Tit 2 r 1 1 (1) 4 (1) 0-11

Chiffchaff 7 5 3 2 (1) 17 (1) 4-22

Willow Warbler r 1 1 1 (1) 3 (1) 0-41

Blackcap 14 5 7 2 (1) 28 (1) 6-28

Whitethroat (1) (1)

Sedge Warbler 2 2 0-9

Nuthatch 3 1 2 6 0-10

Treecreeper r 3 1 1 5 1-11

Wren 22 17 14 9 (1) 62 (1) 24-84

Blackbird 8 8 6 2 (1) 24 (1) 9-38

Song Thrush 3 3 2 2 (1) 10 (1) 0-12

Mistle Thrush 1 1

Spotted Flycatcher 1 1

Robin 9 8 16 2 (1) 35 (1) 10-56

Dunnock r r 2 (1) 2 (1) 1-24

House Sparrow r

Chaffinch 3 5 5 1 14 6-41

Goldfinch r r

Bullfinch r r

Reed Bunting 1 1 r 6 (2) 8 (2) 2-18