

SOUTH BRENT PARISH BIRD SURVEY 2014-16

ANNUAL REPORT 2016



Photos: Steve Hopper

By BRENT BIRDERS

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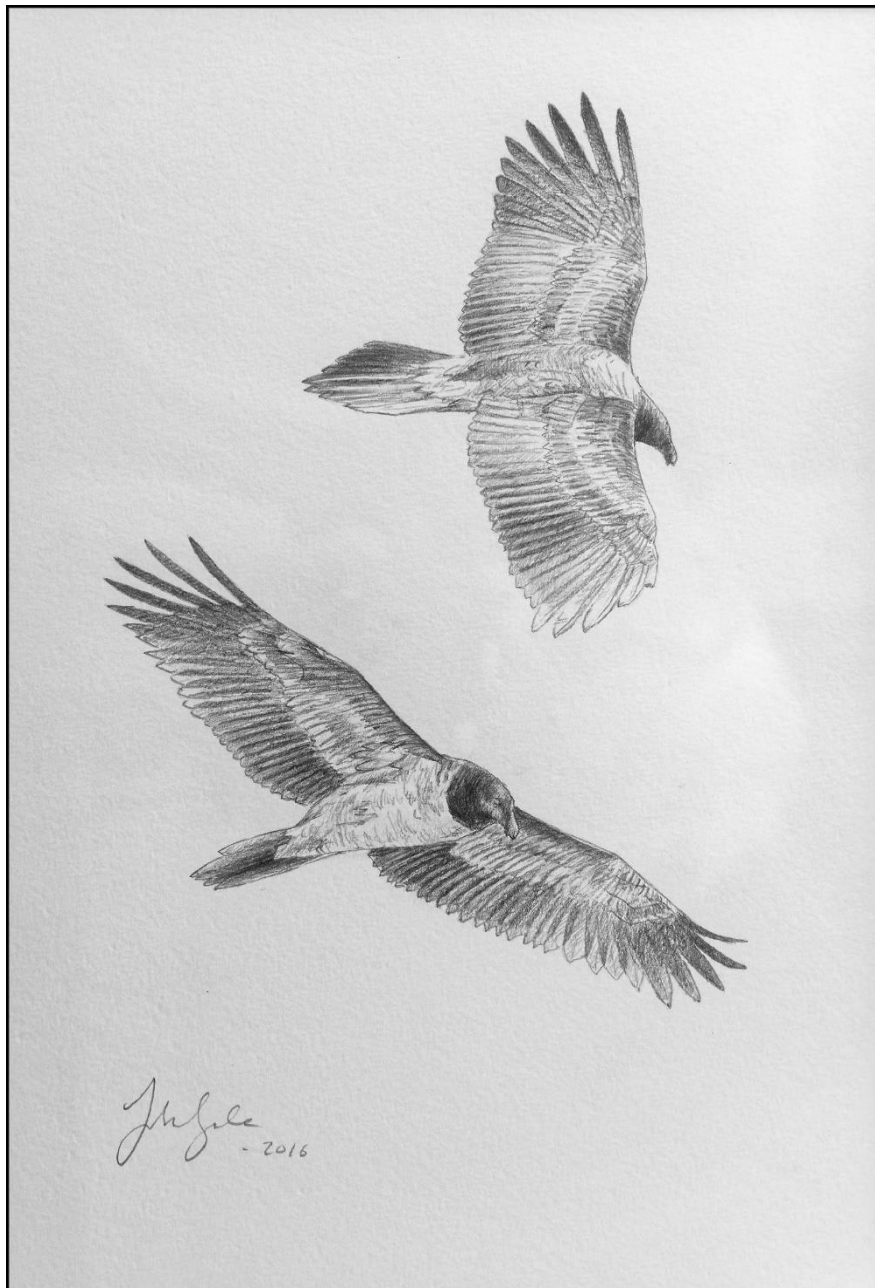
www.brentbirdssurvey.co.uk

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SUMMARY

1. The three-year Brent Bird Survey began in January 2014 and covers the 52 OS 1-km grid squares which include the South Devon parish of South Brent. Small grants received by Brent Birders from South Brent Parish Council and Sustainable South Brent, have been used to help run the survey, publish reports and hold meetings.
2. The aims are to provide a record of birds and some 'non-birds' (mammals, reptiles, amphibians and butterflies) in the parish, to enhance awareness, enjoyment and knowledge of local wildlife through participation in the survey, and to provide a basis for future monitoring of wildlife.
3. Survey forms are filled in by observers and submitted monthly for analysis using a Microsoft Excel database developed for the survey. A website www.brentbirdsurvey.co.uk has also been developed and is used for posting survey details, summary results, news of meetings, interesting sightings and photographs.
4. During 2016, the final year of the survey, 35 observers submitted bird records, and each month records were received from at least 21. All 52 squares were visited by at least one observer each month. Compared to 2014 and 2015, there were slightly fewer observers, but more square visits and more records submitted.
5. A total of 115 bird species were recorded during 2016, compared to 112 in 2015 and 105 in 2014, and the survey total is now 123, with six new species added during 2016. Monthly totals ranged from 69 in January to 81 in October, and species recorded per square ranged from nine to 69, all similar to the previous two years.
6. The most widespread species were Carrion Crow, Buzzard, Raven, Swallow and Wren, all occurring in at least 49 squares over the year. A further 18 species were recorded in at least 40 squares. The maximum flock size of about 1,000 was recorded for Fieldfare, Starling and Woodpigeon, and flocks of 100 or more were recorded in a further six species.
7. Although only three species were added to the list of probable/confirmed breeding species, Kingfisher, Little Owl and Treecreeper, more information on breeding was collected for all species, and the continuation of the detailed study on six species of moorland breeding birds has enabled comparisons to be made between 2015 and 2016.
8. Among mammals, the main addition has been several records of Otter, which went unrecorded in the first two years of the survey. There were no surprises among the reptiles and amphibians, though more Grass Snakes were recorded, and there were no reports of Adders. Clouded Yellow returned to the list of butterfly species after an absence in 2015, but it was a poor year for most species compared to 2015.
9. Mean monthly temperatures in 2016 were higher in May and August, and lower in March, April and November, compared to the previous two years. Total monthly rainfall was higher in March, June and September and lower in May, August and October – December. However, such figures conceal shorter periods of extreme weather which probably affected birds, butterflies and even observers.
10. A third year of observations has added much to our knowledge of the wildlife of South Brent, particularly on breeding birds. The survey has now produced a comprehensive inventory of what is present, and so provides a sound basis for future monitoring.



Immature Lammergeier, Dartmoor, 2016, by John Gale

(reproduced here by kind permission of the artist)

Although 85% of the 123 bird species recorded during the survey were found during the first year, and the basic patterns of species distribution and occurrence also established quite early on, every subsequent month of the survey has brought fresh revelations. In 2016, this is shown, for example, by the red symbols in Table 2, the comparison between 2015 and 2016 in moorland breeding bird numbers and the six new species found during the year. But no one could have predicted that one of these would be the immature **Lammergeier** or Bearded Vulture, which darkened the skies over Barrie Whitehall on the never-to-be-forgotten morning of 16 May. Not only new to Brent, it was new to Devon and effectively the British Isles (though still awaiting acceptance by the rarities committees)! Presumably it was the same bird that was seen and photographed a few days earlier in Gwent, and subsequently elsewhere on Dartmoor and in Cornwall, but it certainly put Brent and the bird survey on the map, in the papers and on the radio. Other memorable high points were the first two records of **Girl Bunting**, the first confirmation of **Kingfisher** breeding, a wintering **Hen Harrier**, a count of 220 roosting **Pied Wagtails**, records of **Wryneck** and **Yellow-browed Warbler** in the village and the long-awaited sightings of **Otter**. On the downside, were the weather-related declines in several moorland breeding bird species and in butterflies.

Background

A group of local bird watchers, soon to be known as Brent Birders, started to meet in 2011. After two years of informal meetings in the village pubs, and occasional field trips, the possibility of carrying out a parish bird survey was raised and discussed. Skills and experience within the group (identification and IT skills; experience of other survey work) suggested that such a survey was feasible, and would also provide a suitable focus for the group's interests. A procedure was designed, loosely based on established bird survey methodology, and a pilot survey carried out in the autumn of 2013. This was successful, and with only minor changes to the methodology, the full three-year Brent Bird Survey (BBS) was launched in January 2014.

Brent Birders *provide a focus for recording birds and other wildlife in the South Brent area, and for promoting and encouraging an interest in local wildlife.* This is partly achieved by organising meetings and talks to help maintain and stimulate an interest in wildlife. These are open to all, and usually attract attendances in excess of 30. Speakers in 2016 included Barrie Whitehall (two talks – Moorland Breeding Birds and Migration), Mike Langman (Bird Identification) and Mike Goss & Paul Heatley (Druid Wood).

Aims and Scope of the Survey

- **Aims:**
 - a) To provide a record of the birds (and some other wildlife) in the parish of South Brent.*
 - b) To enhance awareness, enjoyment and knowledge of local wildlife.*
 - c) To provide a basis for future wildlife monitoring in the parish*
- **Area.** See Map 1. Broadly the parish of South Brent, but more specifically the 52 OS 1-km grid squares which have at least 10% of their area within the parish boundary. For some of the analysis this area is divided into three zones: **North** (moorland), 22 squares; **Central** (including the village), 16 squares; and **South** (outside the Dartmoor National Park boundary, and south of the A38), 14 squares.
- **Period.** Three years, 2014 - 2016, for the survey, although the final report will include records and information from before this period.
- **Species.** All bird species in the wild are included, and, optionally, some 'non-birds' - butterflies, mammals, reptiles and amphibians.
- **Records.** Species seen or heard in each 1-km square in each month form the basic bird and non-bird records, with the option for birds of adding further information on maximum numbers and breeding. A record comprises a species, a month, a square and an observer.
- **Visits.** A visit comprises the records submitted by one observer for a specified square and month, and ranges from a single species recorded on one brief visit to a square to a daily accumulation of observations made during the month, typically in a garden
- **Participation.** Open to anyone.

Input and output

Survey forms, for both birds and non-birds, were available as printed or electronic versions, and were also downloadable from the website. Most people used these forms as email attachments to send their records in each month, but other routes were acceptable, including leaving paper forms at *artworks* for collection, as an email message or by phone. Records were initially received by MG and PR who queried any unusual records with observers before accepting, rejecting, or recommending submission to the Devon Birds County Recorder. Records on paper forms were typed up onto electronic forms before all are sent to DM, who

designed and operates the Excel database used to process the data. In most cases, the records were then simply copied and pasted in as raw data.

A monthly output, usually produced within three weeks of the end of each month, has been made possible by the prompt submission of monthly records, and the machinations of the database. Initially the output from DM was available in the form of monthly and cumulative spreadsheets sent to the other organisers. From these, PD updated maps and other information on the website www.brentbirdsurvey.co.uk (built by PD, webmaster), and PR produced a monthly summary sheet, both for the website and for email distribution by MG to all on the Brent Birders mailing list. A weekly summary by BW, posted on the website as 'Whitehall's Weekly Wanderings' continued until October 2016, after which it appeared as 'Reay's Riveting Resume'. Non-bird records have been collated separately by PD.

This annual report is the third of three, covering each year of the survey. Work has now started on producing a comprehensive final report on The Birds of South Brent, which should appear online and as a printed report in late 2017. A second part, on non-birds, is planned for publication in 2018.

Links with other organisations

- **South Brent Parish Council.** An initial grant of £100 towards the printing and publicity costs of running the survey was received from the South Brent Community Benefit Fund.
- **Sustainable South Brent.** An initial grant of £100 towards the costs of running the survey and holding meetings was received from the SSB Sustainability Fund. A second grant, of £200, was received in 2016. The SSB Bulletin has been used to promote the survey and report results.
- **Devon Birds**, www.devonbirds.org. Several observers have submitted records to Devon Birds, but the only Devon Birds records appearing in this report are those gleaned from their website. An introductory article on the survey will be published in the April 2017 issue of the *Devon Birds* journal.
- **Butterfly Conservation (Devon Branch)**, www.devon-butterflies.org.uk. Selected records have been exchanged between BBS and the Devon Branch of Butterfly Conservation, and some members have been involved in surveys of Marsh Fritillaries in the parish on behalf of the Devon Branch.
- **Devon Biodiversity Records Centre.** The 2014 mammal records collected during the survey have now been submitted to DBRC and those for 2015 and 2016 will follow.
- **Dartmoor Study Group.** This group no longer exists, but the Goosander Roost Survey has continued, and monthly dawn counts on the Avon Dam Reservoir have again provided information both for this survey and the BBS.

Results - Birds in 2016

More detailed results can be found on the website www.brentbirdsurvey.co.uk.

Table 1: Squares, observers and visits in each year.

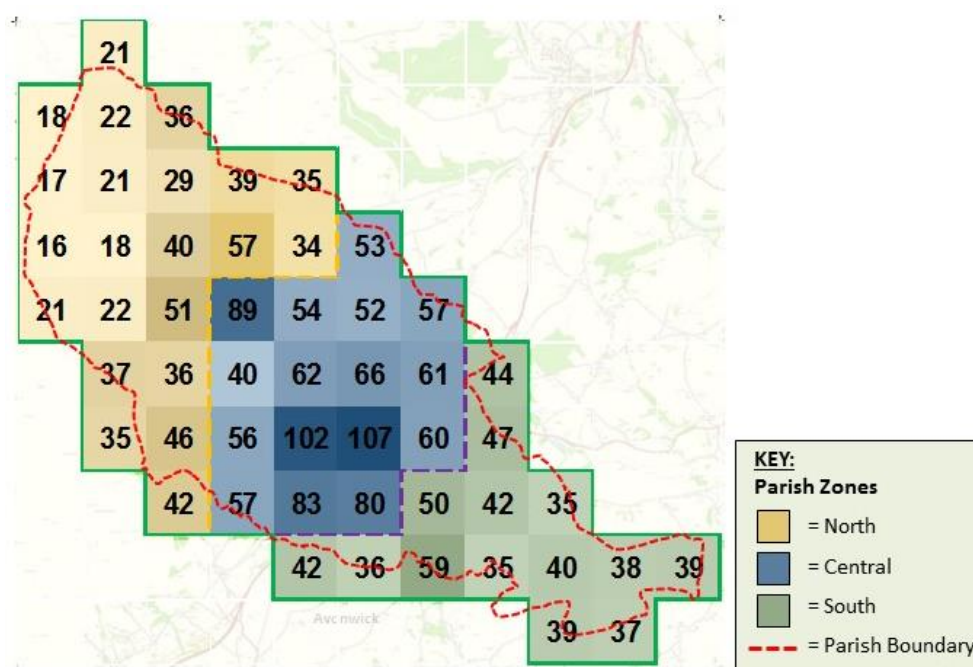
FEATURE	2016	2015	2014
Squares visited each month	52	52	52*
Total number of observers during the year	35	45	54
Number of observers per month (mean and range)	26 (21 – 31)	27 (23 – 30)	33 (25 – 40)
Total number of square visits	2,338	2,278	2,076
Square visits per month (mean and range)	195 (161 – 240)	190 (154 – 226)	172 (128 – 200)
Annual number of visits per square (mean and range)	45 (16 – 107)	44 (14 – 106)	40 (11 – 127)
Total number of records	35,838	27,459	24,314

*Except in Jan-Mar when up to four squares were not visited

The Observers

- Relative to 2014 and 2015, the number of observers has declined, but the numbers of square visits, visits per month and records were higher in 2016 than in either of the previous two years (Table 1).
- The number of visits to a square throughout the year ranged from 16 to 107 (Map 1), with a mean of 45, which is similar to 2015, and rather higher than in 2014.
- As usual, the number of squares visited per observer during the year ranged from one to 52, and about half the observers still sent in records from a single square.

Map 1: Bird Survey area, parish boundary and the total number of visits to each square during 2016.



Species recorded

- The main species recorded are shown in Table 2, grouped under Resident, Summer Visitors, Winter Visitors and Others (including passage visitors, occasional visitors or status unclear). These 94 species occurred in at least two months and/or at least two squares. In addition, the following 15 species, also recorded in 2014 and/or 2015, were present mostly in just one square: **Common Sandpiper, Firecrest, Great Crested Grebe, Green Sandpiper, Jack Snipe, Osprey, Pied Flycatcher, Red-legged Partridge, Sand Martin, Short-eared Owl, Willow Tit, Wryneck and Yellow-browed Warbler.**
- A further six species were recorded, again mostly in one square, which were new to the survey: **Cirl Bunting, Lammergeier*, Marsh Harrier*, Snow Bunting, Tufted Duck and Wood Warbler.**
 * = subject to acceptance by the relevant rarity committee.
- With the addition of eight species only recorded in 2014 and/or 2015, but not in 2016, **Curlew, Dartford Warbler, Goshawk, Greenshank, Little Ringed Plover, Lesser Whitethroat, Red Grouse** (droppings only) and **Yellow Wagtail**, this brings the survey total to 123 after three years.
- Thankfully, no species considered to be escapes or releases from captivity were recorded in 2016!

Table 2: Brent Bird Survey 2016.

The main species, grouped according to occurrence and ranked by total number of squares where recorded in 2016, showing number of squares, monthly occurrence and maximum counts of birds seen together. Species names in bold indicate confirmed/probable breeding.

○ = recorded only in 2014 and/or 2015. # = recorded in 2016 and one other year.

◆ = recorded only in 2016. ● = recorded in all years.

GROUP	SPECIES	No. of squares	Months												Max. count
			J	F	M	A	M	J	J	A	S	O	N	D	
RESIDENTS	Carrión Crow	52	●	●	●	●	●	●	●	●	●	●	●	●	36
	Buzzard	51	●	●	●	●	●	●	●	●	●	●	●	●	8
	Raven	51	●	●	●	●	●	●	●	●	●	●	●	●	9
	Wren	50	●	●	●	●	●	●	●	●	●	●	●	●	6
	Dunnock	48	●	●	●	●	●	●	●	●	●	●	●	●	8
	Meadow Pipit	48	●	●	●	●	●	●	●	●	●	●	●	●	40
	Blackbird	47	●	●	●	●	●	●	●	●	●	●	●	●	14
	Chaffinch	46	●	●	●	●	●	●	●	●	●	●	●	●	45
	Chiffchaff	46	●	●	●	●	●	●	●	●	●	●	#	●	10
	Great Tit	46	●	●	●	●	●	●	●	●	●	●	●	●	10
	Robin	45	●	●	●	●	●	●	●	●	●	●	●	●	9
	Woodpigeon	44	●	●	●	●	●	●	●	●	●	●	●	●	900
	Blue Tit	44	●	●	●	●	●	●	●	●	●	●	●	●	12
	Magpie	44	●	●	●	●	●	●	●	●	●	●	●	●	17
	Goldfinch	42	●	●	●	●	●	●	●	●	●	●	●	●	100
	Pheasant	42	●	●	●	●	●	●	●	●	●	●	●	●	10
	Skylark	42	●	●	●	●	●	●	●	●	●	●	●	#	40
	Herring Gull	42	●	●	●	●	●	●	●	●	●	●	●	●	250
	Pied/White Wagtail	42	●	●	●	●	●	●	●	●	●	●	●	●	220
	Mistle Thrush	41	●	●	●	●	●	●	●	●	●	●	●	●	32
	Goldcrest	41	●	●	●	●	●	●	●	●	●	●	●	●	18
	Blackcap	40	●	●	●	●	●	●	●	●	●	●	●	●	6
	Song Thrush	40	●	●	●	●	●	●	●	●	●	●	●	●	10
	Jay	39	●	●	●	●	●	●	●	●	●	●	●	●	5
	Bullfinch	39	●	●	●	●	●	●	●	●	●	●	●	●	7
	Jackdaw	38	●	●	●	●	●	●	●	●	●	●	●	●	300
	Kestrel	38	●	●	●	●	●	●	●	●	●	●	●	●	3
	Coal Tit	38	●	●	●	●	●	●	●	●	●	●	●	●	8
	Gt Sp Woodpecker	37	●	●	●	●	●	●	●	●	●	●	●	●	4
	Starling	37	●	●	●	●	●	●	●	●	●	●	●	●	1000
	Grey Wagtail	36	●	●	●	●	●	●	●	●	●	●	●	●	4
	Rook	36	●	●	●	●	●	●	●	●	●	●	●	●	100
	Sparrowhawk	36	●	●	●	●	●	●	●	●	●	●	●	●	4
	Long-tailed Tit	34	●	●	●	●	●	●	●	●	●	●	●	●	15
	Green Woodpecker	33	●	●	●	●	●	●	●	●	●	●	●	●	5
	Stock Dove	33	●	●	●	●	●	●	●	●	●	●	●	●	19
	Nuthatch	32	●	●	●	●	●	●	●	●	●	●	●	●	6
	Greenfinch	32	●	●	●	●	●	●	●	●	●	●	●	●	13
	House Sparrow	30	●	●	●	●	●	●	●	●	●	●	●	●	50
	Stonechat	29	#	●	●	●	●	●	●	●	●	●	●	●	10
	Grey Heron	27	●	●	●	●	●	●	●	●	●	●	●	●	2
	Mallard	27	●	●	●	●	●	●	●	●	●	●	●	●	40
	Treecreeper	27	●	●	●	●	●	●	●	●	●	●	●	●	6
	Yellowhammer	27	#	●	●	●	●	●	●	●	●	●	●	●	34

Table 2: Brent Bird Survey 2016. (cont.)

GROUP	SPECIES	No. of squares	Months												Max. count
			J	F	M	A	M	J	J	A	S	O	N	D	
RESIDENTS (cont.)	Collared Dove	25	●	●	●	●	●	●	●	●	●	●	●	●	24
	Snipe	25	●	●	●	●	●	#	#	#	#	●	●	●	3
	Tawny Owl	22	●	●	●	●	●	●	●	●	●	●	●	●	5
	Reed Bunting	19	#	●	●	●	●	●	●	●	●	●	●	●	6
	Moorhen	15	●	●	●	●	●	●	●	●	●	●	●	●	6
	Dipper	15	●	●	●	●	●	●	●	●	●	●	●	●	4
	Cormorant	13	●	●	○	○	#	#	#	#	#	●	#	#	3
	Marsh Tit	13	●	●	●	●	●	●	●	●	●	●	●	●	2
	Siskin	12	●	●	●	●	●	●	#	●	●	●	●	#	10
	Kingfisher	8	●	#	◆		●	●	#	#	#	●	●	●	3
	Little Grebe	4	◆	#	●	●	●	●	●	●	●	●	#	#	2
	Little Owl	1	○	○	○	○	○			#		○	○		2
	Mute Swan	1	●	●	●	●	●	●	●	●	●	●	●	●	1
SUMMER VISITORS	Swallow	49			●	●	●	●	●	●	●	●	◆		90
	House Martin	37				●	●	●	●	●	●	●			50
	Linnet	35			○	●	●	●	●	●	●	●			60
	Willow Warbler	31				●	●	●	●	●	●				10
	Wheatear	28			●	●	●	●	●	●	●	●			7
	Canada Goose	27	○	●	●	●	●	●	●	#	◆	●	●	●	40
	Swift	27				#	●	●	●	●					12
	Cuckoo	18				●	●	●	#						4
	Spotted Flycatcher	18					○	●	#	●	●				5
	Whitethroat	17				●	●	●	●	●	●	○			6
	Tree Pipit	15				●	●	●	●	◆					5
	Garden Warbler	12				○	●	●		○					1
	Whinchat	11				#	●	●	●	●	●				3
	Hobby	11				○	●	●	●	●	●	●	○		2
	Redstart	10				○	○	●	●	●	○	◆			2
	Grasshopper Warbler	4				◆	○		○	#	◆				1
	Lesser Redpoll	4				#	○	#	○	◆					2
WINTER VISITORS	Redwing	44	●	●	●	○						●	●	●	100
	Fieldfare	35	●	●	●	○						●	●	●	1000
	Woodcock	17	●	●	#	◆						#	●	●	2
	Golden Plover	12	●	●	#							#	●	●	300
	Merlin	7	◆	○	○	○						●	◆	●	1
	Hen Harrier	7		○								◆	#	◆	1
	Goosander	6	●	●	●	●	●		◆		○	●	●	●	29
	Brambling	3		◆	◆							◆	○		1
	Teal	3	#	#	●	#	○	◆		◆	●	●	#	●	50
	Wigeon	3	●	#	◆								◆	●	82
	Pintail	1	◆	◆								○	#	#	3
	Coot	1	◆	◆	◆									○	1
OTHERS	Peregrine	20	●	●	●	●	●	○	#	#	◆	●	●	●	2
	Great Black-backed Gull	15	●	●	●	●	●	●	●	○	◆	○	#	#	6
	Lesser Black-backed Gull	15	#	#	#	●	#	#	○	#	◆	#		○	20
	Ring Ouzel	9	○			#					○	●	●	○	15
	Barn Owl	8		◆	#			○			○	◆	#	◆	1
	Sedge Warbler	4							◆	#	○				2
	Black-headed Gull	3	○	○	○	○			○	◆	○	◆			2
	Little Egret	1		○	○		○					#	○	○	1
	Black Redstart	1				○	○			◆			○		1
	Red Kite	1					●	○				○			1
TOTAL SPECIES			69	72	74	77	76	76	78	81	74	81	72	71	

Distribution

- The number of squares in which each species recorded in 2016 is used to rank the species within each of the four groups in Table 2.
- Carrion Crow** was the only species recorded in all 52 squares with **Buzzard** and **Raven** in 51. Over the three years, it is only these species that have been recorded in all squares. All are opportunistic predators or scavengers which can forage over a wide area, and are not restricted to specific habitats. The most widespread summer visitor was **Swallow**, in 49 squares the same as in the previous two years of the survey, again able to feed or migrate over almost any habitat, followed by **Chiffchaff** in 46 showing a small increase each year (although recorded in all months, it is mainly a summer visitor). **Redwing** was the most widespread winter visitors, recorded from 44 squares an increase on the 36 squares of 2015, but similar to the 42 of 2014. The other winter thrush visitor the **Fieldfare** was present in 35 squares compared with 37 in 2015 and 26 in 2014.
- The number of squares occupied by the most common species (in 40 or more squares) is similar in each year (Table 3). In those species that have changed by five or more squares from 2015 there were more increases than decreases. Those increasing were: **Treecreeper** and **Redwing** (+8), **Lesser Black Backed Gull** (+7), **Bullfinch**, **Snipe**, **Wheatear** and **Golden Plover** (+6), **Pied/White Wagtail**, **Tawny Owl**, **Moorhen**, **Spotted Flycatcher** and **Peregrine** (+5). Those decreasing were: **Great Black-backed Gull** and **Little Egret** (-8), **Whitethroat** (-7), **Great Spotted Woodpecker** (-6) and **Grey Heron**, **MarshTit** and **Whinchat** (-5).
- The number of species recorded per square ranged from nine to 69 for the whole year (Map 2). The differences largely reflect the lower number of species on open moorland, compared to the lower altitude squares, with their greater range of habitats and better coverage by observers. In a few moorland squares in winter, there appeared to be no birds present at all.

Table 3: The most widespread species – recorded in at least 40 squares during the year

Number of squares	Species in 2016	Species in 2015	Species in 2014
52	Carrion Crow	Buzzard, Carrion Crow	Carrion Crow
51	Buzzard, Raven		
50	Wren	Raven	
49	Swallow	Swallow, Wren	Buzzard, Swallow
48	Dunnock, Meadow Pipit	-	Wren
47	Blackbird	Dunnock	-
46	Great Tit, Chiffchaff	Goldfinch, Meadow Pipit	Blackbird, Chaffinch, Meadow Pipit, Raven, Starling
45	Robin	Chaffinch, Robin, Woodpigeon	
44	Wood Pigeon, Magpie, Blue Tit, Redwing	Blackbird, Blue Tit, Chiffchaff, Pheasant	Robin
43		Great Spotted Woodpecker, Great Tit, Magpie	Herring Gull, Magpie, Woodpigeon
42	Pheasant, Herring Gull, Skylark, Goldfinch	Skylark	Blue Tit, Chiffchaff, Dunnock, Goldfinch, Redwing, Skylark
41	Goldcrest, Mistle Thrush	House Martin	Mistle Thrush
40	Blackcap, Song Thrush	Blackcap	Great Tit, Song Thrush

KEY:

Parish Zones

- = North
- = Central
- = South
- = Parish Boundary

- The pattern of monthly occurrence is used to determine the four groups of species in Table 2.
- The majority of species have been recorded in every month, and most can be regarded as Residents. Those added in 2016 comprise **Canada Goose**, **Great** and **Lesser Black-backed Gulls**, and **Peregrine** but none are considered to be resident. Paradoxically two that have been moved to the Resident category have *not* been recorded in all months, **Kingfisher** (not recorded in April) and **Little Owl**. However, there is now evidence that these species breed in the parish and, being quite sedentary, are likely to be present all year.
- Seventeen species are considered to be Summer Visitors, mostly wintering in Africa, but the list also includes **Canada Goose**, **Lesser Redpoll** and **Linnet** which mainly visit the area to breed, and are mostly absent November to February.
- On the basis of further records in 2016, five species have been moved into the Winter Visitor group: **Brambling**, **Coot**, **Hen Harrier**, **Merlin** and **Pintail**. Summer records of two of the original winter visitors, **Goosander** and **Teal**, may suggest local breeding, both being known to breed elsewhere on Dartmoor.
- Among the passage migrants, **Pied Flycatcher**, **Sedge Warbler** and **Ring Ouzel** were recorded in similar months to 2015, but there were no records of **Yellow Wagtail**, and the only **Black Redstart** turned up in August instead of the more usual late autumn period.

- In 2016, more effort was put into finding evidence for breeding than in the previous two years. Probable/confirmed breeding was established for three new species, **Kingfisher**, **Little Owl** and **Treecreeper**. This brings the total to 67 species for the survey.
- BW continued to collect detailed information on the numbers and distribution of several moorland breeding birds in 2016, a study which involves careful observation of breeding behaviour over several visits and the mapping of territories. As a result, unlike other species, we now have a good idea of the numbers breeding in the parish as most of these are entirely, or largely, restricted to the moorland areas surveyed. With the addition of the 2016 data, we can now also begin to understand

how numbers and distribution can vary between years. It needs to be pointed out that the numbers refer to *possible* territories in that birds were present on each of the visits in the breeding season, but did not necessarily breed.

- As can be seen from Table 4, the only species that showed an increase from 2015 was **Stonechat**, which bucked the trend with 85 territories (*cf.* 60 in 2015). This could possibly be related to what was thought to be a good breeding season in 2015 with more individuals recruited to the population. All of the squares occupied in 2015 were re-occupied in 2016 with most showing an increased number of possible territories, some the same number and only one, the Small Brook square (23), showing a decrease. There was anecdotal evidence of fewer broods raised in 2016 which might have a knock on effect into 2017.
- For the other five species in the survey, falls in breeding numbers were recorded. Both of the bunting species are seen in the winter at lower altitudes in the parish and were recorded at some of these wintering sites well into May or even June. **Reed Bunting** eventually showed only a slight fall in territory numbers in 2016 with 17 territories (*cf.* 19 in 2015). Several late occupied territories were in bracken, a plant that would not normally be mature enough to host this species if it arrived back on the moor at its normal time. By arriving late, the bracken was thick enough to allow the birds to nest in it; however, their late arrival probably meant that only a single brood was fledged. For **Yellowhammer** the picture was very different, with territory holding birds on the moor being significantly down in numbers, with only 13 territories found in 2016 (*cf.* 35 in 2015). It was thought that there was an increase in territories on farmland at lower altitudes in 2016 than in 2015, although this could be due to more attention being paid to recording parish-wide breeding in 2016.
- For the three long-distance migrant species studied, **Wheatear**, **Whinchat** and **Tree Pipit**, territory numbers were also down on those recorded in 2015. The decreases were probably not significant for **Wheatear**, with 21 in 2016 (*cf.* 24 in 2015), and **Whinchat**, with 16 in 2016 (*cf.* 20 in 2015), but much more significantly for **Tree Pipit** with an estimate of only seven in 2016 (*cf.* 14 in 2015). For this species, arrival dates seemed to have been the same as in 2015, in the third week in April, with, for example, five singing males recorded on former 2015 territories in the Dockwell square (28). However, the following week saw some very cold weather conditions, including frost and cold winds, such that by the end of the month only one male could be seen, and only two territories in that area were eventually recorded as occupied, compared with six in 2015.
- So, apart from **Stonechat**, 2016 must be thought of as a poor year with reductions in the number of occupied territories, in some cases significantly so, when compared with 2015. This trend also appeared to be reflected in other small moorland passerines such as **Meadow Pipit**. However, for **Carrion Crow**, nesting was much the same as in 2015 despite some nesting trees being blown over in the winter of 2015/16. Displaced pairs appeared to be faithful to their 2015 nesting area, with new nests built nearby, and an additional square, Western White Barrow, was occupied where it had not been in 2015, possibly by a pair displaced from a nest washed away that overhung the River Avon upstream of Huntingdon Cross. The tree used was the only one in the Western White Barrow square and visible from the former nesting site.

Map 3: Distribution of breeding territories for Yellowhammer in 2016

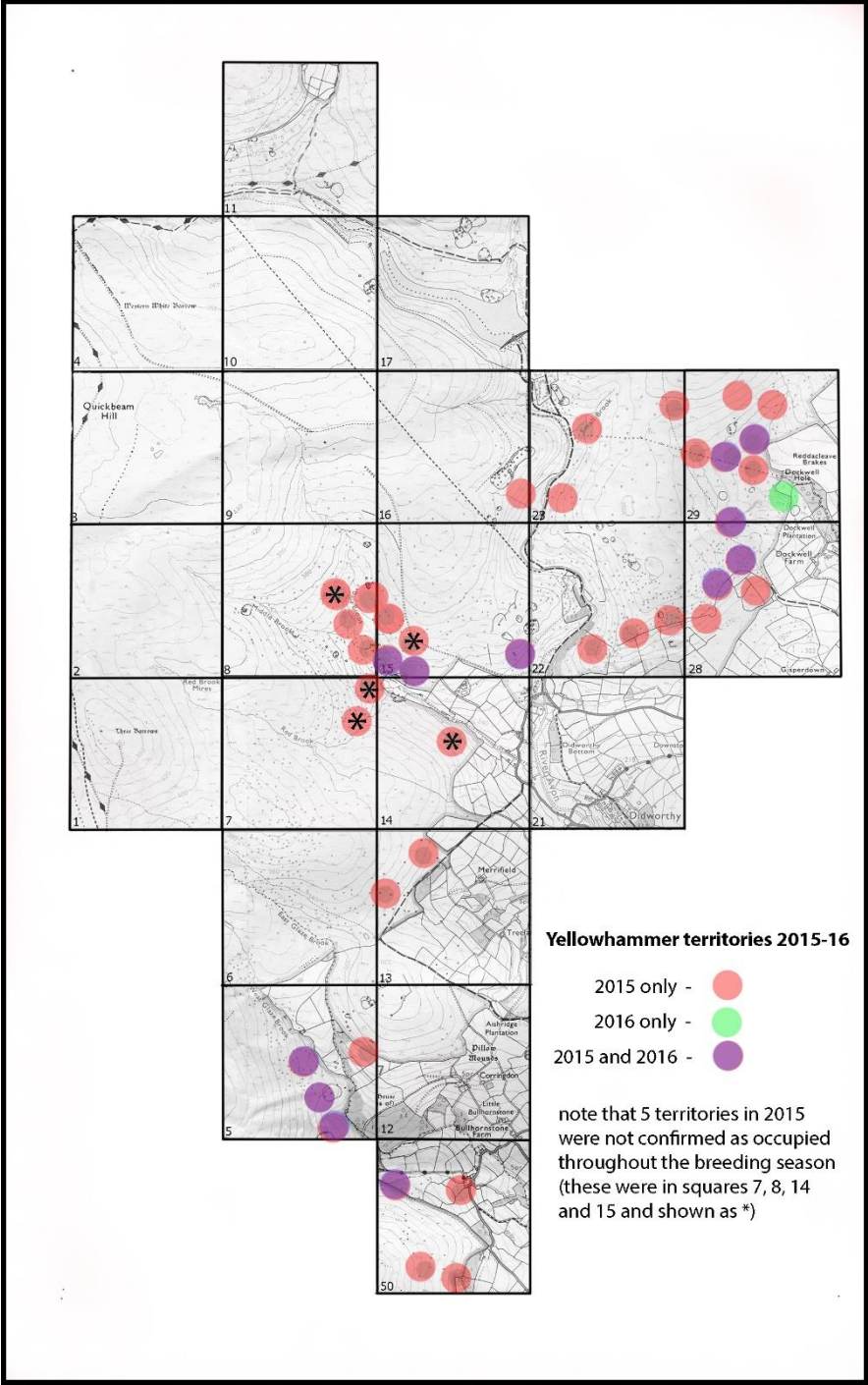


Photo: Steve Hopper

Table 4: The number of territories for six moorland species in 22 Brent parish squares in 2016 (bold) and 2015 (in parentheses).

The maximum number per square for each species in each year is in red.

SQUARE NAME	Square Number	SPECIES					
		Stonechat	Whinchat	Wheatear	Reed Bunting	Tree Pipit	Yellow-hammer
Three Barrows	1			1	1 (1)		
Petre's Pit Bottom	2	2 (1)		(1)			
Knatta Barrow	3				1 (1)		
Western White Barrow	4						
West Glaze Brook	5	5 (2)		1		(2)	3 (4)
Brent Fore Hill	6	14 (11)		3 (3)			
Red Brook	7	2 (1)		1 (1)	1 (1)		
Middle Brook	8	9 (6)	3 (2)	1 (1)	2 (1)	(1)	(3)
Broad Rushes	9	5 (4)	3 (4)		3 (4)		
Eastern White Barrow	10	1	1 (2)		1 (1)		
Huntingdon Cross	11	3 (2)	1 (1)	8 (6)	1 (3)		
Corrington Ball	12	1 (1)					
Merrifield	13	3 (3)		2 (2)			(2)
Zeal	14	2 (1)		1 (1)	(1)	1 (1)	
Brent Moor	15	3 (1)	1 (1)			(1)	3 (4)
Rider's Rings	16	2 (3)	2 (3)	1 (6)	1		(1)
Avon Dam	17	8 (4)	1 (2)	2 (3)	2 (2)		
Dockwell Ridge	22	7 (2)				1 (4)	(3)
Small Brook	23	3 (5)	2 (3)		2 (2)	2 (1)	(3)
Dockwell	28	4 (4)			(1)	2 (1)	3 (5)
Dockwell Hole	29	9 (7)	2 (2)		1	(1)	3 (6)
Owley	50	2 (2)			1 (1)	1 (2)	1 (4)
TOTAL TERRITORIES		85 (60)	16 (20)	21 (24)	17 (19)	7 (14)	13 (35)

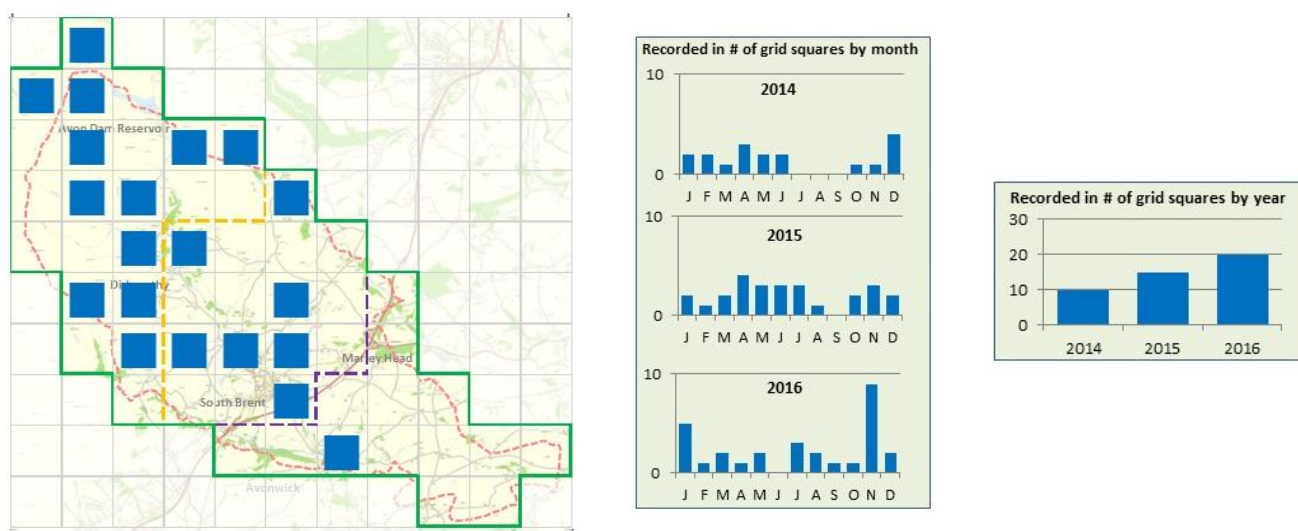
Maximum counts

- Recording the numbers of birds is an optional feature of the survey, but several observers provide this information. For some species it is of limited value without knowing the area surveyed or the time spent counting. However, for species which form groups or flocks, it can give a useful index of abundance and how this varies between species, months, squares and years. Maximum counts for 2016 are given in Table 2, whether flocking species or not.
- Counts of around 1,000 were received for **Fieldfare**, **Starling** and **Woodpigeon**. For the latter species, the count was of birds in migrating flocks, the maximum of 900 being considerably less than the 6,500 of 2015. The **Fieldfares** were feeding, but on the move and the **Starlings** persisted for several months, feeding on maize cattle feed, but probably not roosting in the parish. Other species occurring in flocks of 100 or more were **Golden Plover**, **Goldfinch**, **Herring Gull**, **Jackdaw**, **Pied Wagtail** (roosting) and **Redwing**.

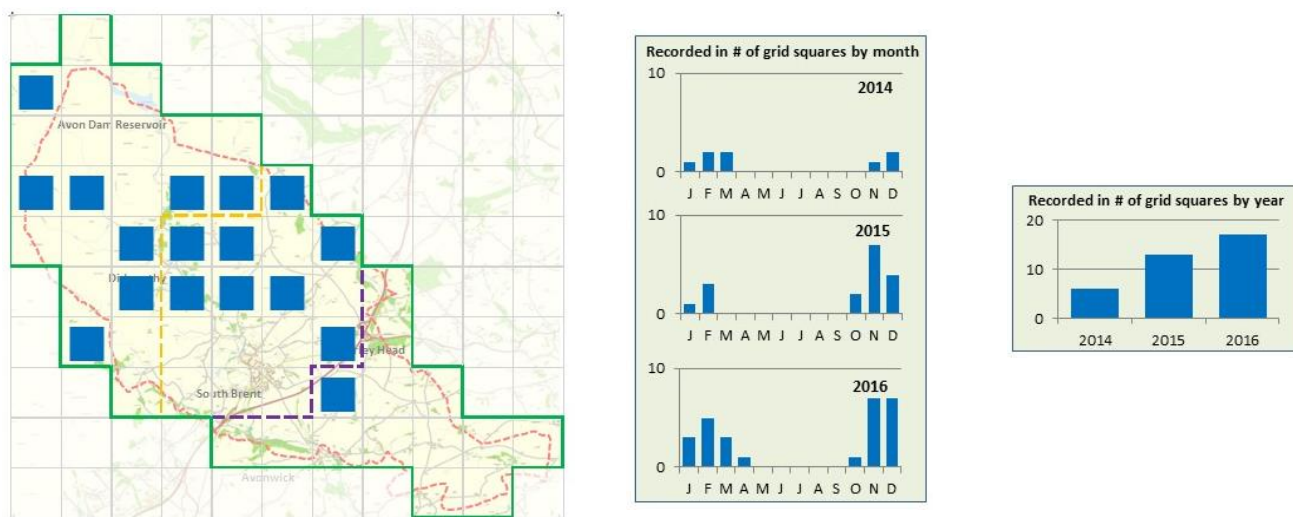
Maps 4a to 4d show distribution and monthly presence of several typical species. The full data can be seen on the Brent Bird Survey website at www.brentbirdsurvey.co.uk.

After three years of the Brent Bird Survey it is interesting to show the number of squares where a species has been recorded by year to reveal any possible decline or increase. Accordingly, these bar charts are shown below but these data should be treated with caution as other factors can have a significant effect, such as weather conditions or observer presence and skills.

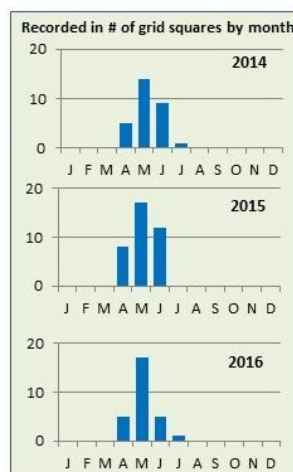
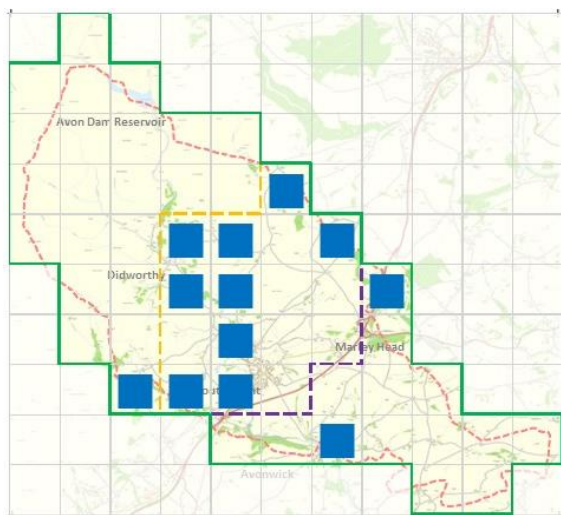
Map 4a: Distribution of Peregrine in 2016. Widespread mainly in the north and central zones. Breeds nearby, but not within the parish. Recorded all year round but the monthly square count is irregular with a possible dip in late summer. Worthy of note is the increase in the Peregrine's square count over the three years of the survey, but this does not necessarily mean that Peregrines are increasing.



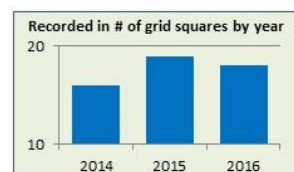
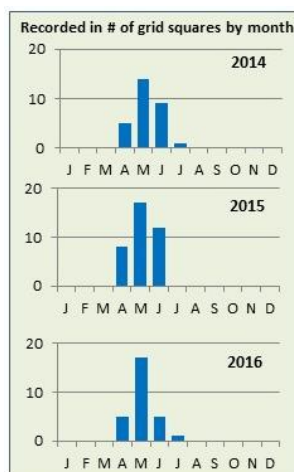
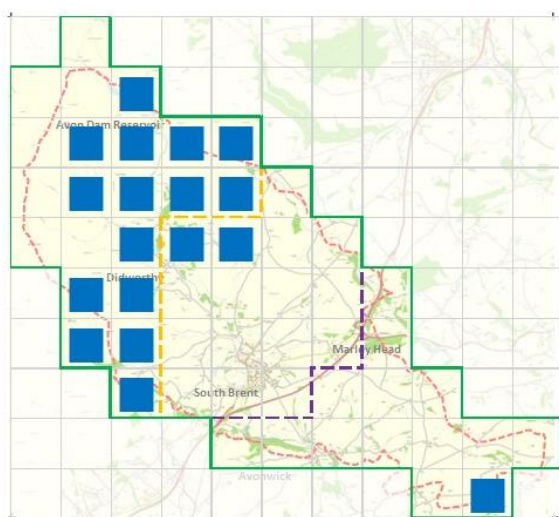
Map 4b: Distribution of Woodcock in 2016. Widespread mainly in north and central zones. Only recorded between October and April, this species is a winter visitor and passage migrant to Brent, probably mostly from continental Europe. Like the Peregrine the Woodcock shows a marked increase in square count over the three years of the survey, which could be reflecting an increased ability to find these birds.



Map 4c: Distribution of Marsh Tit in 2016. Mainly a central zone resident species, with evidence of probable or confirmed breeding now from four squares. The bar charts below show that the number of squares where the Marsh Tit was recorded in each month was down on the previous two years but the overall square count showed a less pronounced decline. Thus the distribution held up although the abundance of the species may well have been lower in 2016.



Map 4d: Distribution of Cuckoo in 2016. The Cuckoo is very much an iconic summer species and extensive research is being carried out by Charles Tyler's team at Exeter University and by the BTO to understand its decline nationally. In South Brent it's predominantly a moorland edge species with the annual square count remaining fairly steady. The record of one in the south zone in 2016 was of a migrant heading north in April.



Photos:
Steve Hopper



Results - Non-birds in 2016

- During 2016 non-bird enthusiasm continued to blossom as 30 observers submitted records, compared to 28 in 2015 and 15 in 2014, and as a result there were records for 19 species of *mammal*, six *reptiles & amphibians* and 28 *butterflies*.
- There were two new *mammals* in 2016. Almost certainly present throughout the survey, the first **Otter** was not recorded until the final year, and then in three squares 25, 32 and 36. Most shrews remain unidentified but a **Water Shrew** was brought in by a cat in 24, suggesting that there are at least three species at large in the parish. The three most widespread *mammals* were **Mole** (36 squares and mainly recorded from fresh molehills) and **Rabbit** (26 squares).
- Amongst the *reptiles* there was not a single record of **Adder** in 2016 compared with just one in 2015. However, **Grass Snake** showed a welcome increase to five squares from one in 2015 and none in 2014. **Lizard** showed a decline to nine squares in 2016 compared with 15 in 2015, while **Slow-worm** showed a slight decline to five squares from seven in 2015. **Frog** (22 squares), **Newt** (7 squares) and **Toad** (8 squares) had similar coverage as in 2015.
- 2016 was a very poor year for *butterflies* across the country. Initial data from Butterfly Conservation is dismal, with the blues (including the **Small Copper**) especially suffering, and a recorder (not in the Parish) has stated that 2016 was the worst year in his 32 years of recording butterflies. A total of 28 species of *butterfly* were recorded in the parish in 2016 compared with 27 in 2015, the additional species being the migrant **Clouded Yellow**. Once again **Meadow Brown** had the widest coverage being recorded in 41 squares (compared with all 52 in 2015). However, this was almost equalled by **Red Admiral** (39 squares), **Speckled Wood** and **Small White** (both 38 squares). Significant declines from 2015 to 2016 were **Common Blue** (from 14 to six squares), **Large Skipper** (from 27 to nine) and **Gatekeeper** (from 39 to 25). **Small White** was the only species to show a significant increase, from 28 to 38.

Table 5: The number of non-bird species groups by year

	2016	2015	2014
Mammals	19	18	19
Reptiles & Amphibians	6	7	5
Butterflies	28	27	28

Table 6: The non-bird species recorded in 2016, with the number of squares in which each was recorded

Mammals	Mole (36), Rabbit (26), Grey Squirrel (22), Roe Deer (20), Domestic Cat (19), Fox (18), Bat* & Hedgehog (9), Mouse* (8), Badger, Brown Hare & Vole* (7), Stoat (6), Brown Rat (5), Polecat, Ferret, Otter, Shrew* & Weasel (3) and Dormouse (2).
Reptiles and Amphibians	Frog (22), Lizard (9), Toad (8), Newt *(7) and Grass Snake & Slow-worm (5)
Butterflies	Meadow Brown (41), Red Admiral (39), Small White & Speckled Wood (38), Green-veined White (36), Large White (25), Gatekeeper & Ringlet (25), Orange Tip (23), Painted Lady & Small Tortoiseshell (17), Peacock (16), Small Heath (14), Silver-washed Fritillary (10), Large Skipper (9), Holly Blue (8), Small Pearl-bordered Fritillary (7), Brimstone, Comma, Common Blue, Green Hairstreak & Wall (6), Purple Hairstreak & Small Copper (4), Marsh Fritillary (3) and Clouded Yellow, Marbled White & Small Skipper (2)

* not usually identified to species; each comprises more than one species

Table 7: Butterflies. The number of squares in which each species was recorded in each year, and in each month in 2016.

Species	YEARS			MONTHS IN 2016											
	2016	2015	2014	J	F	M	A	M	J	J	A	S	O	N	D
Brimstone	6	13	9				3	3	1			1			
Clouded Yellow	2	0	9									2			
Comma	6	19	17			1				3	3	1	1		
Common Blue	6	14	13					4	3		3	1			
Gatekeeper	25	39	36							16	21				
Green Hairstreak	6	13	2					4	3						
Green-veined White	36	35	44					12	8	19	26	4			
Holly Blue	8	15	8					2	1	1	4	1	1		
Large Skipper	9	27	24						5	4	1				
Large White	26	26	10					6	7	11	21	5	2		
Marbled White	2	4	3							2					
Marsh Fritillary	3	3	2						3						
Meadow Brown	41	52	49						12	40	28	3			
Orange Tip	23	21	22				4	20	7						
Painted Lady	17	24	6					1	10	7	8	3			
Peacock	16	34	36			5	7	2	1	3	12	2	2	1	
Purple Hairstreak	4	4	1							1	3				
Red Admiral	39	36	37	2		1		5	8	18	35	24	24	11	2
Ringlet	25	32	32						3	25	3	1			
Silver-washed Fritillary	10	18	8							8	7	1			
Small Copper	4	5	14						1		4		1		
Small Heath	14	21	20						8	9	5				
Small Pearl-bordered Fritillary	7	10	5						7						
Small Skipper	2	6	4							2					
Small Tortoiseshell	17	34	38			4	2	2	2	7	10	9	2		
Small White	38	28	28			1	2	10	3	22	31	23	2		
Speckled Wood	38	41	38				1	11	23	7	32	28	12		
Wall Brown	6	9	12					3	1		2	3			
TOTAL SPECIES	28	27	28	1	0	5	6	14	21	19	20	17	9	2	1



Marsh Fritillary near Shipley Bridge

Photos:
Phil Dean



Brimstone egg on Alder Buckthorn
near the centre of South Brent

Comparison between years

With three years of data now available, we are in an even better position than last year to identify what is most likely to stay the same each year and what is most likely to change. If it had been a one-year survey, that would have been impossible. If we were to continue the full survey for more years, our understanding would become even greater, but probably at the expense of even more mental and physical damage than inflicted so far! Three years seems a realistic compromise.

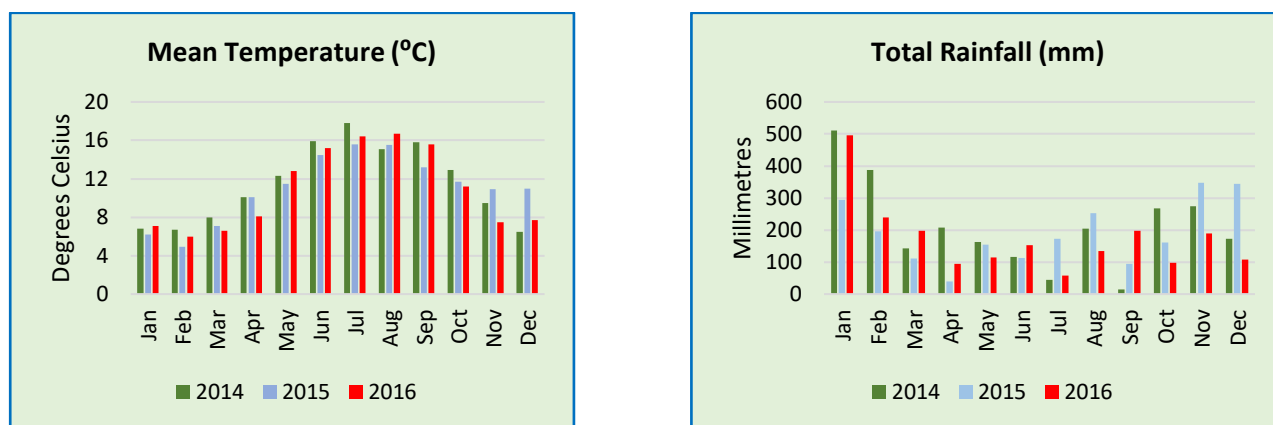
In terms of the effort applied to obtain data, this has remained relatively constant. The number of observers has slightly declined, but more importantly the number of square visits has increased from year to year. This, and the increased knowledge of the parish and its birds derived from the experience of the survey, has probably had some effect on the results, but overall, the number of species, the most widespread species, those with the largest flock sizes, and the general distribution and monthly patterns of occurrence of the more common species has not changed a great deal. Yet the detailed study of moorland breeding birds started in 2015 has shown that numbers within squares did change considerably for several species. There were more **Stonechat** territories in 2016 than 2015, but fewer **Yellowhammers** and **Tree Pipits** in particular, and although **Meadow Pipit** and **Skylark** territories were not included in the census, there was some indication of lower numbers, and of birds leaving breeding areas during the breeding season and leaving early at the end of it, perhaps indicating poor breeding success. Spells of cold and windy weather, not necessarily showing up in monthly means and totals, probably played a part in the 2016 downturn, and if this particular study continues into at least a third year, the results could be very revealing. Equally interesting, may be the decline of **Marsh Tit**, which was recorded in 16 squares in 2014, 18 in 2015, but only 12 in 2016. These might not be significant difference, but we ought to be getting better at finding this species, so the decline probably indicates either that it just had a poor year in 2016, or is reflecting the problems this species is having both nationally and in Devon. Further monitoring will hopefully shed light on the situation.

Otherwise, the main differences between the years concern the less common species. The **Lammergeier** was mind-blowing in the extreme. The chance of one being over here, and then being in sight of the one Brent Birder who would have known what he was looking at, is very small indeed, and totally unexpected. But the other new birds for 2016 were all rare visitors to the parish, whose occurrence in sight of an observer, is also a matter of chance. In that sense, it was probably not a question of discovering something that had been there all along, though it is possible that **Cirl Bunting** falls into that category, and the breeding **Kingfisher** and **Otter** records almost certainly do. Experience of **Black Redstarts** in 2015 should have enabled us to find them in 2016 if they had been around, but searches of likely haunts failed to find any. An unfavourable wind direction may have been the problem, though human fallibility cannot be ruled out! Paradoxically, the only one to turn up was in August rather than November, which is in itself a rare event in the county. It was perhaps a single wandering individual **Little Egret** that made 2015 look a good year for that species, compared to 2014 and 2016. Similarly, the widespread occurrence of **Peregrine** in 2016, is probably more to do with the movements of one or two birds, rather than an improvement in our ability to find this species or an increase in numbers.

Weather has already been referred to, and a summary is presented in Table 8. In 2016, March, April and November were colder, and May and August warmer, than in the previous two years. Three months, March, June and September were wetter than in 2014 and 2015, but five, May, August, October, November and December were drier. Short-term weather effects may be more critical than these monthly values, but all go to illustrate the annual variations in weather, which may have an impact on wildlife.

Large changes over three years are perhaps unlikely, and where change is observed it is usually not possible to explain it unequivocally. However, being aware of any changes is the first step. Maps and other information for all the bird species for each year are available on the website www.brentbirdsurvey.co.uk. Readers are encouraged to look at these and make their own conclusions about changes over the last three years, in advance of our interpretations which will hopefully appear in the final report scheduled for completion in autumn 2017.

Charts 1 and 2: Monthly mean temperature and total rainfall for South Brent village 2014 – 16



Conclusions and future plans

Although the two aims of the survey had been achieved by the end of 2014, continuation of the survey into 2015 and 2016 has enabled us to gain a more robust understanding of the birds and other wildlife of the parish, and hopefully we have also continued to increase awareness of wildlife, both through the survey and also the meetings arranged by Brent Birders.

Having three years of data enables comparisons to be made between years, and begins to give a better understanding of which wildlife events are more likely to be consistent from year to year and which are more likely to change. Analysis and presentation of the wealth of data accumulated (over 87,000 bird records alone) is now underway and will be published as *The Birds of South Brent Parish* and articles in *Devon Birds* later in the year.

It is planned to continue monitoring each year, but in a more restricted way. The full survey was carried out in January 2017, and will probably be repeated each May and January. Surveyors will be contacted about such future plans when finalised, and details will also be posted on the website www.brentbirdsurvey.co.uk.

Finally, Brent Birders will continue to hold meetings where invited speakers will inform, entertain and further enhance local interest in wildlife, and will continue to encourage submission of interesting observations on the wildlife of South Brent parish.

Acknowledgements

The following observers regularly submitted records from at least one square during the year: Margaret Andrade, Dave & Janet Ayres, Eileen Blockly, Mick Bramich, John & Sylvia Caddick, Phil & Sue Dean, Andrew & Kit Ferguson, Mike & Jan Goss, Adam & Lucy Grant, Laurette Guest, Clare Guthrie, Sylvia & Peter Hamilton, Helen Harvey, Paul & Barbara Heatley, Gill Honey, Steve Hopper, Mike Ingram, Ann & Tim Ley, John Luscombe, Dave MacDiarmid & Vanessa Brown, Jonathan Nicholson, Dave & Kate Pakes, Jane Pickard, Adrian & Gaynor Platt, Gordon Raymont, Peter Reay & Lesley Austin, Tony Rose & Louise Scammell, Val Stanley, Barrie Whitehall, Julia, Robin & Jack Willoughby and Margaret & Dave Worrall.

Casual records were also received from: Wendy Blackwell, James Blake, Richard & John Buckpit, John Cranch, Mark Darlaston, Steve Davies, Judy Davy, Laura Denning, Beth & Richard Finnemore, Simon Geary, Noel Goodey, Robert & Leonard Hurrell, David & Simone Jeffrey, Doug King Smith, George Link, Keith Male, Mike Passman, Jo Pelly, John Roberts, Robert Savery, Andy Smith, Frances Sparkes, Ellie Standen, Doug Stannard, Jane Sullivan, Pip Vaughan-Hughes, Jane Wellens & John Wilson and John Widdicombe. Thanks to all.

Thanks also to: South Brent Parish Council, Sustainable South Brent and Devon Birds for their support; *artworks* for providing a distribution and collecting point for forms; Richard Oram for the weather data; Steve Hopper and Phil Dean for permission to use their photographs; and all the landowners who gave permission for access to their land.

Further information on wildlife relevant to this survey can be found on the following websites:

British Trust for Ornithology www.bto.org

Butterfly Conservation www.butterfly-conservation.org

Devon Birds www.devonbirds.org

Devon Wildlife Trust www.devonwildlifetrust.org

Royal Society for the Protection of Birds www.rspb.org.uk



Photo: Steve Hopper