

An analysis of the bird species records from the LWVP Langley's Lane and Rushy Common hides 2015 to 2018

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Introduction

The record books kept in the LWVP hides at Langley's Lane (Standlake, Pit 60) and Rushy Common are from time to time transcribed to Excel spreadsheets. Rachel Crookes, the LWVP project officer, recently suggested that it would be interesting to analyse these to see if there are any obvious trends in the bird populations at the two sites. She kindly gave me copies of the spreadsheets and what follows is my attempt at such an analysis.

The transcription of the records is not quite up-to-date but is complete for 2015, 2016 and 2017 for Rushy Common, and from May 2015 to December 2018 for Langley's Lane. With such a relatively short 'lever arm' (time span) it will be difficult to draw any hard and fast conclusions about possible trends. In what follows the 'quantum' of time is one year which is probably the minimum period which gives adequate statistics, and which encompasses all seasons – it would be misleading to compare, for example, counts for October to March with counts for April to September because of the different winter and summer migrants.

There are a number of other caveats (see below) which make it difficult to draw firm conclusions, nevertheless some tentative conclusions can be drawn from the records.

Summary

Details and full species lists are given below but the most significant conclusions that I have been able to extract from the records are (over the observation period):

- i. A combined total of **164 species** has been observed at the two sites.
- ii. A significant **decrease** in the number of records of **Grey Herons** at both sites, but
- iii. A large **increase** in the number of records of **Great White Egrets** at both sites.
- iv. An apparent **decrease** in the number of records of **Little Grebes** at Rushy Common.
- v. A significant (– **30%**) decrease in the numbers of **waders** recorded at Langley’s Lane, but
- vi. An increase (**+50%**) in the number of **waders** recorded at Rushy Common.
- vii. **Wintering duck** populations fluctuate but remain healthy.

Caveats

Because species and counts are recorded by different visitors to the hides they to some extent reflect the interests, enthusiasms and identification skills of the recorders. Common species such as Coots, which are almost always present at both sites are probably under-recorded, or recorded simply as ‘the usual suspects’, whereas relatively exotic species (e.g. Great White Egrets) are more likely to be recorded. Species which are difficult to identify, in particular some species of Gull, will be recorded only by experts even though they may frequently be present. Such biases are evident in the species lists which follow and are another reason why the results given below should be regarded with a large pinch of salt.

Records

Records were available for a total of 428 days at Rushy Common from January 2015 to December 2017, and 571 days from May 2015 to December 2018 at Langley’s Lane. Some records refer to areas adjacent to the nominal sites. Some species, e.g. Red-crested Pochards, seem to prefer the lakes adjacent to Pit 60. I have not tried to weed these out.

The records from the two sites are somewhat different. Most commonly simply the presence of a species is recorded at Rushy Common; numbers are recorded occasionally but often the comment is simply ‘lots’ or ‘hundreds’. There are, however, regular and very precise counts of the abundance of some species, particularly wintering ducks, in the Langley’s Lane records but often simply the presence, but not the numbers, of other species is recorded. The following analysis is, therefore, based mainly on the *presence* of a species, i.e. a species is simply counted as ‘one’ if the species was present on a day where there was a record and I have made no attempt to use the numbers. However, some interesting graphs of the numbers of several wintering duck species are given later.

Analysis and estimators

There are three ‘estimators’ for each species in the following tables. The first, ‘*Pres.*’, is the average presence of a species. This is simply the fraction of the records in which the species was recorded. If this is close to 1 (100%) then it’s likely that the species is resident or a regular visitor.

The second estimator, 'Var.', indicates the variability of the records of a species over the three or four year period. A large value of *Var* means that the numbers of the species fluctuate (all else being equal!) more than one would expect from simple statistical variations and *may* be indicative of an upward or downward trend in numbers present.

The third estimator is 'Trend' which is the average rate of annual increase or decrease of the records of a species. *Trend* is given only if *Var* is large, meaning that the trend in numbers may be significant.

The tables give the annual 'raw' numbers of records for each species. To account for the different number of total record days each year, both *Var* and *Trend* are based on the raw numbers 'normalised' to the total number of days each year for which there were records ('Record days' in the headers of Table 8 and Table 9). In other words *Var* and *Trend* use the 'presence' for each year.

Species counts and trends

Full species lists by year, ordered by presence, are given in Table 8 and Table 9 at the end of this report. There are no significant trends in the numbers of species (roughly 110) recorded each year at either site.

Total species counts

Table 1 summarises the total species counts for the two sites. A total of 164 species has been recorded for the two sites combined. The same 90 species were recorded each of the three years at Rushy Common, and 78 at Langley's Lane.

Table 1: Total species counts for Rushy Common and Langley's Lane.

Species counts			
Rushy Common			
	Total species recorded	136	
	Species recorded every year	90	Residents or regular visitors
Langley's Lane			
	Total species recorded	141	
	Species recorded every year	78	Residents or regular visitors
Same species recorded at both sites		113	
Total species recorded at both sites		164	

The top dozen species

Table 2 and Table 3 show the twelve *most recorded* species at the two sites. Interestingly, there is very little overlap – only two out of twelve – between these species at the sites, which may reflect the enthusiasm of the recorders as mentioned above. However, both sites seem to show a significant decline in the number of records of Grey Herons. The apparent decline of the number of waders at Langley’s Lane is discussed later. No other significant trends are apparent.

Table 2: Top twelve species recorded at Rushy Common.

RUSHY COMMON									
Species	Days species recorded as present				Total	Pres.	Var.	Annual	
	2015	2016	2017					Trend	(%/yr)
Great Crested Grebe	102	89	84		275	0.64	0.2	0.0	
Tufted Duck	98	96	76		270	0.63	2.7	0.0	
Coot	99	90	81		270	0.63	0.6	0.0	
Cormorant	83	86	77		246	0.57	1.7	0.0	
Mallard	89	84	70		243	0.57	1.5	0.0	
Mute Swan	86	82	65		233	0.54	2.2	0.0	
Canada Goose	79	75	78		232	0.54	0.8	0.0	
Red-crested Pochard	63	69	84		216	0.50	7.0	21.4	Up
Black-headed Gull	76	76	61		213	0.50	2.0	0.0	
Grey Heron	90	76	46		212	0.50	9.9	-23.5	Down
Carrion Crow	70	65	56		191	0.45	0.8	0.0	
Gadwall	44	82	57		183	0.43	18.9	16.1	Up

Table 3: Top twelve species recorded at Langley’s Lane.

LANGLEYS LANE									
Species	Days species recorded as present				Total	Pres.	Var.	Annual	
	2015	2016	2017	2018				Trend	(%/yr)
Little Egret	74	95	59	51	279	0.49	22.7	-19.3	Down
Oystercatcher	34	92	84	35	245	0.43	36.4	-4.5	Down
Gadwall	78	62	60	36	236	0.41	21.4	-27.1	Down
Teal	45	56	64	44	209	0.37	1.4	0.0	
Shoveler	47	50	77	21	195	0.34	21.6	-16.3	Down
Common Tern	43	56	44	38	181	0.32	5.4	0.0	
Wigeon	54	45	48	24	171	0.30	14.1	-25.9	Down
Common Sandpiper	46	50	29	40	165	0.29	12.3	-13.3	Down
Lapwing	40	16	47	38	141	0.25	13.7	2.2	Up
Green Sandpiper	58	27	24	13	122	0.21	48.3	-51.1	Down
Great White Egret	0	42	43	31	116	0.20	35.1	32.5	Up
Grey Heron	49	27	19	11	106	0.19	40.3	-51.5	Down

Most variable species

Table 4 and Table 5 list the ten most variable species at the sites. The general trend at Rushy Common appears to be an increase (although it's hard to believe that no Wrens were present in 2015!). The decrease in the numbers of Little Grebes appears to be significant. There is no evidence (see Table 9) for a similar decrease at Langley's Lane. The increase in the number of records of Great White Egrets at Rushy Common is supported by a similar increase at Langley's Lane, with none being recorded at either site in 2015; in fact they are now commonly seen at both sites.

The general trend of the records of the most variable species at Langley's Lane seems to be downwards, mainly of waders such as Greenshank. This is discussed further below.

Table 4 Most significant changes at Rushy Common

Species	Days species recorded as present				Pres.	Var.	Annual	
	2015	2016	2017	Total			Trend	(%/yr)
Wren	0	52	31	83	0.19	57.5	55.5	Up
Yellow-legged Gull	0	17	0	17	0.04	37.3	0.0	Up
Greenshank	3	19	3	25	0.06	23.2	2.5	Up
Gadwall	44	82	57	183	0.43	18.9	16.1	Up
Great White Egret	0	2	11	13	0.03	17.3	126.6	Up
Coal Tit	1	0	9	10	0.02	15.8	123.8	Up
Great Tit	33	33	57	123	0.29	12.4	36.1	Up
Herring Gull	8	24	12	44	0.10	12.1	17.7	Up
Common Whitethroat	10	1	1	12	0.03	11.1	-107.4	Down
Mediterranean Gull	0	0	5	5	0.01	10.7	150.0	Up
Little Grebe	29	22	7	58	0.14	10.6	-49.6	Down

Table 5: The ten most significant changes in species records from Langley's Lane.

Species	Days species recorded as present					Pres.	Var.	Annual	
	2015	2016	2017	2018	Total			Trend	(%/yr)
Green Sandpiper	58	27	24	13	122	0.21	48.3	-51.1	Down
Redshank	11	7	53	17	88	0.15	43.3	26.3	Up
Kingfisher	3	38	25	7	73	0.13	40.3	-3.2	Down
Grey Heron	49	27	19	11	106	0.19	40.3	-51.5	Down
Oystercatcher	34	92	84	35	245	0.43	36.4	-4.5	Down
Great White Egret	0	42	43	31	116	0.20	35.1	32.5	Up
Ruff	11	1	0	0	12	0.02	33.7	-113.9	Down
Cetti's Warbler	3	6	26	3	38	0.07	28.7	17.6	Up
Greenshank	15	10	1	0	26	0.05	28.7	-85.9	Down
Spotted Redshank	7	0	0	0	7	0.01	24.5	-120.0	Down

The status of waders

As noted in the section above, the most variable and declining species at Langley's Lane seem to be waders. There is also an anecdotal feeling in the local birding community that waders are now less common at Pit 60 than they once were.

Table 6 gives the number of records by year of all waders (by my definition) at Langley's Lane. Whilst there is a lot of annual variability, there is certainly evidence of a decrease in the numbers seen. The bottom rows of the table give the total annual number of records for all the species, and those totals normalised to the number of days for which there were records in the books (i.e. the average annual presence). The decrease from 2.08 in 2015 to 1.44 in 2018 is certainly statistically significant and, all else being equal, can be interpreted as an average drop of thirty percent in the number of waders visiting the site.

Table 7 gives similar information for Rushy Common for the same species. Whilst waders are overall somewhat less common at Rushy Common than at Langley's Lane, the numbers indicate an overall increase (which is statistically significant) of about fifty percent between 2015 and 2017.

Although the statistics are small, the diversity of wader species is somewhat greater at Langley's Lane than at Rushy Common, presumably because the former is closer to Chimney NNR.

Table 6: Langley's Lane records of waders

Species	Days species recorded as present				
	2015	2016	2017	2018	Total
Oystercatcher	34	92	84	35	245
Common Sandpiper	46	50	29	40	165
Lapwing	40	16	47	38	141
Green Sandpiper	58	27	24	13	122
Little Ringed Plover	19	11	42	24	96
Redshank	11	7	53	17	88
Curlew	8	8	12	15	43
Greenshank	15	10	1	0	26
Ringed Plover	5	8	2	6	21
Dunlin	4	4	4	2	14
Ruff	11	1	0	0	12
Black-tailed Godwit	4	2	1	2	9
Spotted Redshank	7	0	0	0	7
Golden Plover	2	1	0	4	7
Whimbrel	0	1	0	1	2
Bar-tailed Godwit	0	1	0	0	1
Total records	264	239	299	197	
Normalised to record days	2.08	1.71	1.79	1.44	

Table 7: Rushy Common records of waders

Species	Days species recorded as present			
	2015	2016	2017	Total
Oystercatcher	62	50	63	175
Lapwing	44	59	42	145
Green Sandpiper	24	12	28	64
Common Sandpiper	23	33	38	94
Greenshank	3	19	3	25
Redshank	4	2	9	15
Ringed Plover	6	1	6	13
Dunlin	4	2	10	16
Little Ringed Plover	3	2	11	16
Black-tailed Godwit	0	3	3	6
Golden Plover	1	2	0	3
Whimbrel	1	0	1	2
Grey Plover	0	0	1	1
Bar-tailed Godwit	0	0	0	0
Curlew	0	0	0	0
Ruff	0	0	0	0
Spotted Redshank	0	0	0	0
Total	175	185	215	
Normalised to record days	1.11	1.38	1.58	

Wintering duck counts

As mentioned earlier, some recorders have kept meticulously precise counts of ducks in the Langley's Lane records. These are plotted for several species for the (nearly) four year period May 2015 – March 2019 in Figure 1. The numbers of Teal and Wigeon typically reach a few hundred each winter; there was an apparent irruption of Shovelers during the winter of 2016 – 2017 and large numbers of Red-crested Pochard are sometimes present. Numbers of Pintail reached over 200 in 2015 – 2016 and then declined to a few tens, at most.

There are so many factors, and so much natural variability involved that it's difficult to reach any firm conclusion. Despite an apparent decline in the numbers of Teal from *circa* 700 to *circa* 280 between 2017 – 2018 and 2018 – 2019, over 1900 were recorded one day (see Oxon Birding Blog) in the winter of 2019 – 2020; over 130 Pintail were also recorded at the same time.

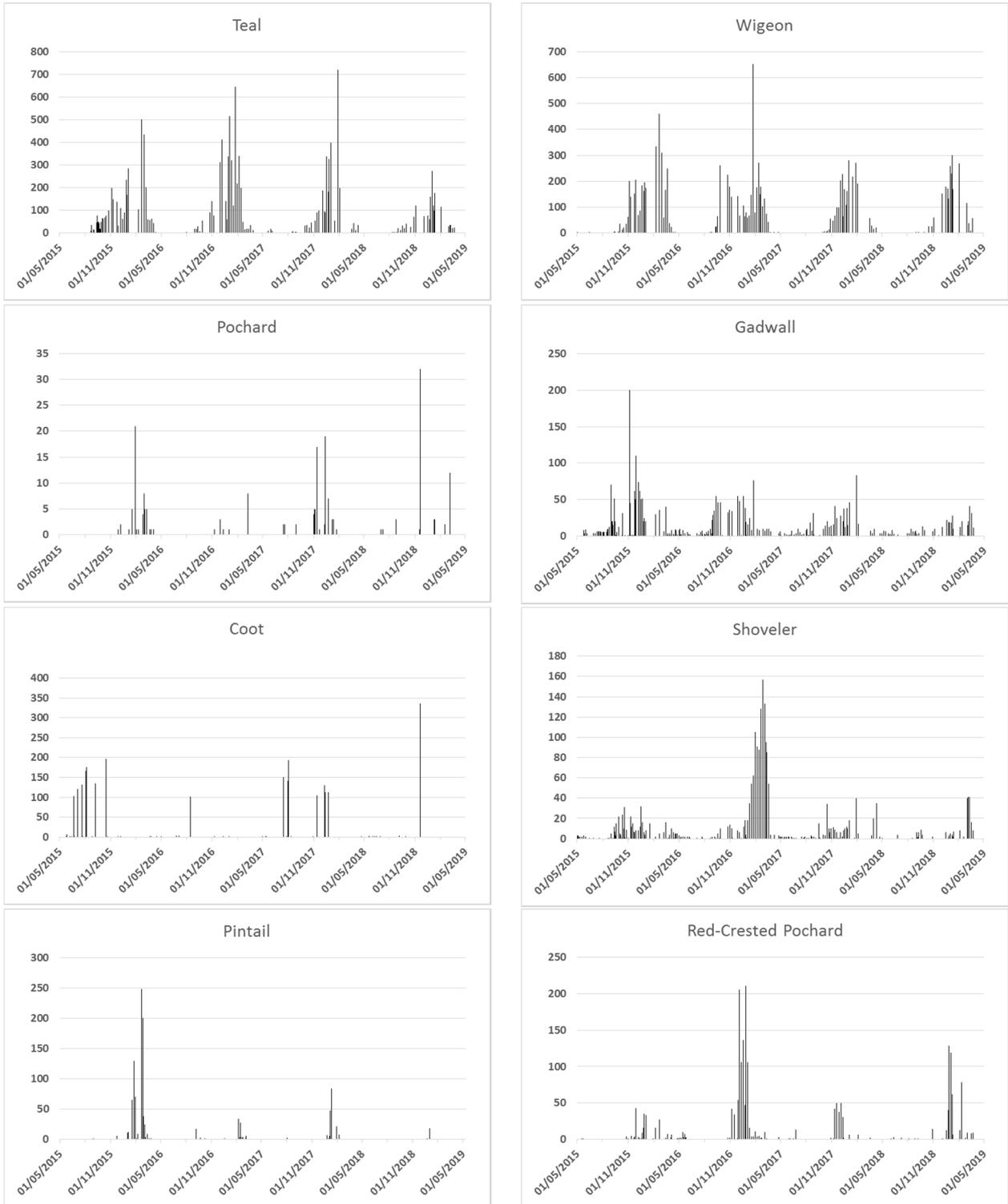


Figure 1: Species counts at Langley's Lane (Pit 60) May 2015 to March 2019. Note that Red-crested Pochards are more often found on the adjacent lakes.

Acknowledgements

Thanks are due to everyone who has kept records in the log books, particularly the meticulous and systematic counts of the wintering ducks.

Species list for Rushy Common 2015 - 2017

Table 8: Species list for LWVP Rushy Common hide, January 2015 to December 2017

RUSHY COMMON								
Year	2015	2016	2017	Total				
Record days	158	134	136	428				
Species records	2946	2842	2421	8209				
Total species recorded each year	113	112	111					
Species recorded every year 2015 - 2017	90							
Total different species recorded	136							
	Days species recorded as present						Annual	
Species	2015	2016	2017	Total	Pres.	Var.	Trend	(%/yr)
Great Crested Grebe	102	89	84	275	0.64	0.2	0.0	
Tufted Duck	98	96	76	270	0.63	2.7	0.0	
Coot	99	90	81	270	0.63	0.6	0.0	
Cormorant	83	86	77	246	0.57	1.7	0.0	
Mallard	89	84	70	243	0.57	1.5	0.0	
Mute Swan	86	82	65	233	0.54	2.2	0.0	
Canada Goose	79	75	78	232	0.54	0.8	0.0	
Red-crested Pochard	63	69	84	216	0.50	7.0	21.4	Up
Black-headed Gull	76	76	61	213	0.50	2.0	0.0	
Grey Heron	90	76	46	212	0.50	9.9	-23.5	Down
Carrion Crow	70	65	56	191	0.45	0.8	0.0	
Gadwall	44	82	57	183	0.43	18.9	16.1	Up
Greylag Goose	67	64	46	177	0.41	3.2	0.0	
Oystercatcher	62	50	63	175	0.41	1.5	0.0	
Moorhen	59	60	53	172	0.40	1.1	0.0	
Lesser Black-backed Gull	60	65	41	166	0.39	5.9	0.0	
Magpie	56	58	44	158	0.37	2.3	0.0	
Wood Pigeon	59	53	45	157	0.37	0.8	0.0	
Buzzard	57	58	41	156	0.36	3.2	0.0	
Common Buzzard	57	58	41	156	0.36	3.2	0.0	
Robin	55	49	46	150	0.35	0.1	0.0	
Wigeon	48	58	42	148	0.35	4.3	0.0	
Lapwing	44	59	42	145	0.34	6.1	0.0	
Blue Tit	47	45	49	141	0.33	0.9	0.0	
Jackdaw	48	54	34	136	0.32	5.1	0.0	
Shoveler	41	51	35	127	0.30	4.6	0.0	
Blackbird	49	47	31	127	0.30	3.6	0.0	
Great Tit	33	33	57	123	0.29	12.4	36.1	Up
Chaffinch	37	40	45	122	0.29	2.5	0.0	
Red Kite	41	49	31	121	0.28	5.0	0.0	
Pochard	30	47	42	119	0.28	7.4	21.0	Up
Goldfinch	38	46	30	114	0.27	4.4	0.0	
Pied Wagtail	38	41	29	108	0.25	2.4	0.0	
Common Tern	46	30	30	106	0.25	1.9	0.0	
Teal	28	29	39	96	0.22	4.0	0.0	
Starling	38	41	17	96	0.22	10.1	-25.8	Down
Common Sandpiper	23	33	38	94	0.22	6.6	29.9	Up
Goldeneye	34	22	30	86	0.20	1.3	0.0	
Wren	0	52	31	83	0.19	57.5	55.5	Up
Egyptian Goose	36	21	26	83	0.19	1.9	0.0	
Little Egret	30	28	25	83	0.19	0.2	0.0	
Rook	27	37	19	83	0.19	7.2	-8.0	Down

Rushy Common (Continued) Species	Days species recorded as present				Pres.	Var.	Annual	
	2015	2016	2017	Total			Trend	(%/yr)
Stock Dove	21	35	23	79	0.18	6.7	9.6	Up
Pheasant	27	27	25	79	0.18	0.4	0.0	
Long-tailed Tit	23	22	23	68	0.16	0.3	0.0	
Bullfinch	27	23	16	66	0.15	1.7	0.0	
Dunnock	25	19	22	66	0.15	0.2	0.0	
Green Sandpiper	24	12	28	64	0.15	6.1	0.0	
Chiffchaff	32	14	18	64	0.15	5.1	0.0	
Kestrel	30	20	9	59	0.14	8.3	-45.8	Down
Reed Bunting	33	12	14	59	0.14	9.2	-39.6	Down
Little Grebe	29	22	7	58	0.14	10.6	-49.6	Down
Sand Martin	19	15	16	50	0.12	0.0	0.0	
Swallow	14	19	12	45	0.11	2.5	0.0	
Herring Gull	8	24	12	44	0.10	12.1	17.7	Up
House Martin	8	15	11	34	0.08	3.4	0.0	
Peregrine Falcon	13	13	8	34	0.08	1.3	0.0	
Song Thrush	15	8	10	33	0.08	1.2	0.0	
Great Spotted Woodpecker	14	9	9	32	0.07	0.6	0.0	
Blackcap	17	10	4	31	0.07	6.2	0.0	
Goldcrest	17	9	5	31	0.07	5.1	0.0	
Green Woodpecker	13	8	10	31	0.07	0.5	0.0	
Redwing	13	13	4	30	0.07	4.9	0.0	
Sparrowhawk	13	8	7	28	0.07	1.2	0.0	
Grey Wagtail	11	12	4	27	0.06	4.0	0.0	
Fieldfare	10	10	7	27	0.06	0.6	0.0	
Kingfisher	17	4	5	26	0.06	9.1	-61.0	Down
Greenshank	3	19	3	25	0.06	23.2	2.5	Up
Swift	13	7	4	24	0.06	3.7	0.0	
Shelduck	3	9	11	23	0.05	5.9	0.0	
Jay	4	5	9	18	0.04	3.0	0.0	
Hobby	8	7	3	18	0.04	1.9	0.0	
Yellow-legged Gull	0	17	0	17	0.04	37.3	0.0	Up
Linnet	9	1	7	17	0.04	5.2	0.0	
Collared Dove	1	9	6	16	0.04	7.4	48.2	Up
Dunlin	4	2	10	16	0.04	7.2	63.6	Up
Little Ringed Plover	3	2	11	16	0.04	10.1	80.9	Up
Snipe	6	7	3	16	0.04	1.6	0.0	
Cuckoo	6	3	7	16	0.04	1.5	0.0	
Redshank	4	2	9	15	0.04	5.7	0.0	
Garden Warbler	8	5	2	15	0.04	2.7	0.0	
Great White Egret	0	2	11	13	0.03	17.3	126.6	Up
Greenfinch	8	5	0	13	0.03	6.5	0.0	
Ringed Plover	6	1	6	13	0.03	3.5	0.0	
Sedge Warbler	1	6	5	12	0.03	4.4	0.0	
Barn Owl	7	3	2	12	0.03	2.5	0.0	
Common Gull	7	3	2	12	0.03	2.5	0.0	
Great Black-backed Gull	6	4	2	12	0.03	1.4	0.0	
Common Whitethroat	10	1	1	12	0.03	11.1	-107.4	Down
Garganey	6	4	1	11	0.03	2.8	0.0	
Reed Warbler	8	3	0	11	0.03	7.4	-104.0	Down
Coal Tit	1	0	9	10	0.02	15.8	123.8	Up
Yellowhammer	0	4	6	10	0.02	6.4	0.0	
Willow Warbler	3	5	2	10	0.02	1.7	0.0	
Pintail	3	4	2	9	0.02	0.8	0.0	
Wheatear	2	2	3	7	0.02	0.4	0.0	
Meadow Pipit	6	1	0	7	0.02	7.4	-125.4	Down
Black-tailed Godwit	0	3	3	6	0.01	3.5	0.0	

Rushy Common (Continued) Species	Days species recorded as present				Pres.	Var.	Annual	
	2015	2016	2017	Total			Trend	(%/yr)
Mediterranean Gull	0	0	5	5	0.01	10.7	150.0	Up
Treecreeper	4	1	0	5	0.01	4.3	0.0	
Sky Lark	2	3	0	5	0.01	2.9	0.0	
Red-legged Partridge	5	0	0	5	0.01	8.5	-150.0	Down
Little Gull	0	0	4	4	0.01	8.6	150.0	Up
Turnstone	1	0	3	4	0.01	3.8	0.0	
Lesser Whitethroat	3	0	1	4	0.01	2.9	0.0	
Mistle Thrush	0	1	2	3	0.01	2.3	0.0	
Barnacle Goose	1	2	0	3	0.01	2.2	0.0	
Golden Plover	1	2	0	3	0.01	2.2	0.0	
Siskin	1	1	1	3	0.01	0.0	0.0	
Osprey	0	2	0	2	0.00	4.4	0.0	
Short-eared Owl	0	2	0	2	0.00	4.4	0.0	
Raven	0	0	2	2	0.00	4.3	0.0	
Mandarin Duck	2	0	0	2	0.00	3.4	0.0	
Redpoll	2	0	0	2	0.00	3.4	0.0	
House Sparrow	0	1	1	2	0.00	1.2	0.0	
Brambling	1	1	0	2	0.00	1.0	0.0	
Ruddy Duck	1	1	0	2	0.00	1.0	0.0	
Stonechat	1	1	0	2	0.00	1.0	0.0	
Whimbrel	1	0	1	2	0.00	0.9	0.0	
Greater Scaup	0	1	0	1	0.00	2.2	0.0	
Scaup duck	0	1	0	1	0.00	2.2	0.0	
Whinchat	0	1	0	1	0.00	2.2	0.0	
Arctic Tern	0	0	1	1	0.00	2.1	0.0	
Avocet	0	0	1	1	0.00	2.1	0.0	
Firecrest	0	0	1	1	0.00	2.1	0.0	
Gannet	0	0	1	1	0.00	2.1	0.0	
Grey Plover	0	0	1	1	0.00	2.1	0.0	
Marsh Tit	0	0	1	1	0.00	2.1	0.0	
Pink-footed Goose	0	0	1	1	0.00	2.1	0.0	
Wood Sandpiper	0	0	1	1	0.00	2.1	0.0	
Grasshopper Warbler	1	0	0	1	0.00	1.7	0.0	
Greater White-fronted Goose	1	0	0	1	0.00	1.7	0.0	
Iceland Gull	1	0	0	1	0.00	1.7	0.0	
Lesser White-fronted Goose	1	0	0	1	0.00	1.7	0.0	
Water Rail	1	0	0	1	0.00	1.7	0.0	
White-fronted Goose	1	0	0	1	0.00	1.7	0.0	

Species list for Langley's Lane May 2015 to December 2018

Table 9: Species list for LWVP Langley's Lane Hide, May 2015 to December 2018

LANGLEY'S LANE									
Year	2015	2016	2017	2018	Total				
	(May - Dec)								
Record days	127	140	167	137	571				
Species records	1187	1342	1559	992	4088				
Total species recorded each year	100	110	120	102					
Species recorded every year 2015 -2018					78				
Total different species recorded					141				
Species	Days species recorded as present					Pres.	Var.	Annual	
	2015	2016	2017	2018	Total			Trend	(%/yr)
Little Egret	74	95	59	51	279	0.49	22.7	-19.3	Down
Oystercatcher	34	92	84	35	245	0.43	36.4	-4.5	Down
Gadwall	78	62	60	36	236	0.41	21.4	-27.1	Down
Teal	45	56	64	44	209	0.37	1.4	0.0	
Shoveler	47	50	77	21	195	0.34	21.6	-16.3	Down
Common Tern	43	56	44	38	181	0.32	5.4	0.0	
Wigeon	54	45	48	24	171	0.30	14.1	-25.9	Down
Common Sandpiper	46	50	29	40	165	0.29	12.3	-13.3	Down
Lapwing	40	16	47	38	141	0.25	13.7	2.2	Up
Green Sandpiper	58	27	24	13	122	0.21	48.3	-51.1	Down
Great White Egret	0	42	43	31	116	0.20	35.1	32.5	Up
Grey Heron	49	27	19	11	106	0.19	40.3	-51.5	Down
Great Crested Grebe	35	24	20	23	102	0.18	10.1	-20.4	Down
Goldeneye	12	25	37	24	98	0.17	6.9	0.0	
Snipe	33	24	18	23	98	0.17	9.7	-19.2	Down
Goosander	11	33	28	25	97	0.17	8.9	13.1	Up
Little Ringed Plover	19	11	42	24	96	0.17	13.9	15.2	Up
Yellow-legged Gull	14	8	42	29	93	0.16	21.8	31.6	Up
Red-crested Pochard	15	35	27	15	92	0.16	10.6	-7.1	Down
Redshank	11	7	53	17	88	0.15	43.3	26.3	Up
Mute Swan	31	12	21	17	81	0.14	13.1	-22.1	Down
Tufted Duck	27	18	16	17	78	0.14	7.6	0.0	
Kingfisher	3	38	25	7	73	0.13	40.3	-3.2	Down
Little Grebe	16	16	26	14	72	0.13	1.9	0.0	
Hobby	9	26	21	16	72	0.13	7.1	0.0	
Peregrine Falcon	19	19	17	15	70	0.12	1.7	0.0	
Egyptian Goose	4	29	18	16	67	0.12	17.7	13.5	Up
Cormorant	20	15	16	9	60	0.11	5.5	0.0	
Coot	17	13	16	13	59	0.10	1.5	0.0	
Moorhen	22	16	9	8	55	0.10	13.4	-40.5	Down
Pintail	4	26	16	9	55	0.10	18.5	1.3	Up
Mallard	12	8	12	13	45	0.08	1.8	0.0	
Greylag Goose	6	13	21	5	45	0.08	9.7	0.1	Up
Pochard	2	19	15	9	45	0.08	12.7	13.5	Up
Water Rail	3	3	20	19	45	0.08	20.5	58.5	Up
Cuckoo	1	12	11	20	44	0.08	16.7	51.7	Up
Curlew	8	8	12	15	43	0.08	3.0	0.0	
Sand Martin	8	5	18	10	41	0.07	5.7	0.0	
Blackcap	11	10	8	11	40	0.07	1.9	0.0	
Chiffchaff	10	11	8	10	39	0.07	1.5	0.0	
Reed Warbler	8	8	10	13	39	0.07	1.9	0.0	

Langley's Lane (Continued)	Days species recorded as present							Annual	
Species	2015	2016	2017	2018	Total	Pres.	Var.	Trend	(%/yr)
Canada Goose	6	10	13	9	38	0.07	1.1	0.0	
Cetti's Warbler	3	6	26	3	38	0.07	28.7	17.6	Up
Black-headed Gull	7	5	18	5	35	0.06	8.8	2.8	Up
Garden Warbler	10	4	10	7	31	0.05	3.2	0.0	
Swift	9	3	6	10	28	0.05	5.6	0.0	
Greenshank	15	10	1	0	26	0.05	28.7	-85.9	Down
Green Woodpecker	10	2	9	4	25	0.04	7.4	0.0	
Swallow	7	2	9	6	24	0.04	3.7	0.0	
Lesser Whitethroat	3	9	2	9	23	0.04	8.4	0.0	
Buzzard	2	4	16	1	23	0.04	18.9	11.4	Up
Common Buzzard	2	4	16	1	23	0.04	18.9	11.4	Up
House Martin	4	2	6	10	22	0.04	6.6	0.0	
Redstart	7	7	4	3	21	0.04	3.4	0.0	
Ringed Plover	5	8	2	6	21	0.04	4.6	0.0	
Wood Pigeon	4	7	9	1	21	0.04	5.3	0.0	
Magpie	2	5	11	2	20	0.04	7.5	0.0	
Sedge Warbler	4	6	5	3	18	0.03	1.0	0.0	
Pied Wagtail	7	4	6	1	18	0.03	4.9	0.0	
Willow Warbler	4	4	2	8	18	0.03	5.2	0.0	
Siskin	10	6	2	0	18	0.03	15.9	-80.0	Down
Lesser Black-backed Gull	4	3	6	4	17	0.03	0.6	0.0	
Stonechat	6	4	5	2	17	0.03	2.4	0.0	
Reed Bunting	3	2	10	2	17	0.03	7.4	0.0	
Carrion Crow	1	6	9	1	17	0.03	8.4	3.3	Up
Chaffinch	1	4	10	0	15	0.03	12.4	3.2	Up
Dunlin	4	4	4	2	14	0.02	0.9	0.0	
Grey Wagtail	7	2	3	2	14	0.02	6.3	0.0	
Kestrel	7	3	3	1	14	0.02	6.9	0.0	
Barn Owl	0	5	9	0	14	0.02	13.1	8.1	Up
Common Whitethroat	4	2	3	4	13	0.02	1.3	0.0	
Whitethroat	4	2	3	4	13	0.02	1.3	0.0	
Fieldfare	3	4	5	1	13	0.02	2.0	0.0	
Jackdaw	1	4	7	1	13	0.02	5.6	0.0	
Pheasant	1	5	7	0	13	0.02	8.1	0.0	
Redwing	2	3	5	2	12	0.02	1.1	0.0	
Raven	1	5	4	2	12	0.02	2.8	0.0	
Starling	1	4	6	1	12	0.02	4.4	0.0	
Ruff	11	1	0	0	12	0.02	33.7	-113.9	Down
Shelduck	3	2	2	4	11	0.02	1.5	0.0	
Jack Snipe	3	2	0	6	11	0.02	7.8	0.0	
Blue Tit	0	4	7	0	11	0.02	10.2	7.6	Up
Red Kite	0	2	7	1	10	0.02	8.8	31.2	Up
Great Tit	0	4	6	0	10	0.02	8.8	4.6	Up
Marsh Harrier	0	8	0	2	10	0.02	17.8	-7.4	Down
Stock Dove	3	1	3	2	9	0.02	1.2	0.0	
Jay	0	3	4	2	9	0.02	3.0	0.0	
Black-tailed Godwit	4	2	1	2	9	0.02	3.0	0.0	
Blackbird	0	3	5	1	9	0.02	5.0	0.0	
Redpoll	5	0	3	1	9	0.02	7.4	0.0	
Sparrowhawk	1	2	4	1	8	0.01	2.0	0.0	
Yellow Wagtail	1	1	2	3	7	0.01	1.5	0.0	
Golden Plover	2	1	0	4	7	0.01	5.7	0.0	
Robin	0	3	4	0	7	0.01	6.1	0.0	
Spotted Redshank	7	0	0	0	7	0.01	24.5	-120.0	Down
Herring Gull	1	1	2	2	6	0.01	0.5	0.0	
Common Gull	2	0	3	1	6	0.01	2.8	0.0	

Langley's Lane (continued)	Days species recorded as present					Pres.	Var.	Annual	
	Species	2015	2016	2017	2018			Total	Trend
Great Spotted Woodpecker	3	0	2	1	6	0.01	3.7	0.0	
Spotted Flycatcher	3	0	1	2	6	0.01	4.1	0.0	
Wren	0	3	3	0	6	0.01	5.2	0.0	
Rook	0	2	4	0	6	0.01	5.8	0.0	
Greenfinch	2	0	4	0	6	0.01	6.1	0.0	
Goldcrest	2	0	2	1	5	0.01	2.2	0.0	
Long-tailed Tit	0	3	1	1	5	0.01	3.9	0.0	
Garganey	1	0	0	4	5	0.01	9.2	69.0	Up
Coal Tit	1	1	2	0	4	0.01	1.6	0.0	
Linnet	1	1	2	0	4	0.01	1.6	0.0	
Marsh Tit	2	1	1	0	4	0.01	2.4	0.0	
Song Thrush	0	2	2	0	4	0.01	3.5	0.0	
Collared Dove	0	3	1	0	4	0.01	6.0	0.0	
Black swan	0	0	4	0	4	0.01	9.7	40.0	Up
Smew	0	1	2	0	3	0.01	2.9	0.0	
Ruddy Shelduck	0	0	2	1	3	0.01	2.9	0.0	
Little Owl	0	2	1	0	3	0.01	3.6	0.0	
Mistle Thrush	0	1	1	0	2	0.00	1.7	0.0	
Meadow Pipit	0	0	1	1	2	0.00	1.8	0.0	
Whimbrel	0	1	0	1	2	0.00	2.1	0.0	
Black Tern	1	1	0	0	2	0.00	2.3	0.0	
Barnacle Goose	0	0	2	0	2	0.00	4.8	0.0	
Bean Goose	0	0	2	0	2	0.00	4.8	0.0	
Brambling	0	0	2	0	2	0.00	4.8	0.0	
Bittern	0	0	0	2	2	0.00	6.3	0.0	
Whooper Swan	0	0	0	2	2	0.00	6.3	0.0	
Great Black-backed Gull	2	0	0	0	2	0.00	7.0	0.0	
Black-winged Stilt	0	0	1	0	1	0.00	2.4	0.0	
Bullfinch	0	0	1	0	1	0.00	2.4	0.0	
Dunnock	0	0	1	0	1	0.00	2.4	0.0	
Goldfinch	0	0	1	0	1	0.00	2.4	0.0	
Hawfinch	0	0	1	0	1	0.00	2.4	0.0	
Little Gull	0	0	1	0	1	0.00	2.4	0.0	
Sky Lark	0	0	1	0	1	0.00	2.4	0.0	
Bar-tailed Godwit	0	1	0	0	1	0.00	3.1	0.0	
Grasshopper Warbler	0	1	0	0	1	0.00	3.1	0.0	
Spoonbill	0	1	0	0	1	0.00	3.1	0.0	
Bar-headed goose	0	0	0	1	1	0.00	3.2	0.0	
Bewick's Swan	0	0	0	1	1	0.00	3.2	0.0	
Green-winged teal	0	0	0	1	1	0.00	3.2	0.0	
Tawny Owl	0	0	0	1	1	0.00	3.2	0.0	
Yellowhammer	0	0	0	1	1	0.00	3.2	0.0	
Ring-necked Duck	1	0	0	0	1	0.00	3.5	0.0	
Wheatear	1	0	0	0	1	0.00	3.5	0.0	