
Tyttenhanger Gravel Pits Bird Report for 2022



**Edited and produced by
Ricky Flesher and Peter Christian**

Contents	Page
<i>Introduction</i>	2
<i>Recording Area and Access</i>	3
<i>Review of the Year – 2022</i>	3
<i>Physical Features</i>	3
<i>Weather</i>	4
<i>Coverage</i>	5
<i>Review of Birding 2022</i>	6
<i>Breeding Summary 2022</i>	8
<i>Taxonomy and Nomenclature</i>	8
<i>Submission of Records</i>	8
<i>Colney Heath Common</i>	8
<i>Coursers Road Gravel Pits</i>	8
<i>Data Collection, Analysis and Presentation</i>	9
<i>Data Collection</i>	9
<i>Description Species and Other Notable Records</i>	9
<i>Analysis</i>	10
<i>Statistics Used</i>	10
<i>Standardization of Data</i>	11
<i>Breeding Records</i>	11
<i>Presentation</i>	12
<i>Hyper-links</i>	12
<i>Species Summaries</i>	12
<i>Summary Tables</i>	13
<i>Corrections and Additions to Previous Reports</i>	13
<i>References</i>	13
<i>Other Resources</i>	14
<i>Contributors and Acknowledgements</i>	15
<i>Systematic List</i>	16
<i>Bearded Tit – A first for Tyttenhanger GPs by Rupert Evershed</i>	50
<i>Appendix 1 – Arrival and Departure Dates for Common Migrants</i>	51
<i>Appendix 2 – Breeding Birds of Tyttenhanger 2022</i>	53
<i>Appendix 3 - Species Year-Lists for Tyttenhanger Gravel Pits for 2004-2022</i>	54

Introduction

This report is the nineteenth we have produced for the site known locally as Tyttenhanger Gravel Pits and as many of you are aware, is the penultimate report the current team will produce. The first Tyttenhanger Report was produced for 1996 (Brew, 1997) and since taking the reins in 2004 we have tried to follow the same general format as that used in the original report. As more and more data have become available, we have expanded our analyses and presentation options while trying to maintain the spirit of 1996 and our earlier reports. We hope that the similar layout and content helps making comparisons across the span of years and the previous reports but we are also able to reflect the ever-changing nature of Tyttenhanger GP's birds. However, anticipating what will be our 20th and final report in 2023 we are hoping to make it somewhat of a "bumper" edition and while keeping the overall format and "jizz" of previous reports will also attempt to summarise as much of the available data as possible. In addition, we are also hoping to complete the log-projected "Breeding Birds of Tyttenhanger GPs" at around the same time, hopefully providing a comprehensive summary of the Birds of Tyttenhanger GPs up to and including 2023. Obviously, when reading the current report if you feel there are any data/pieces of information that you would like to see in the 2023 report then please let us know as soon as you can!

As in previous years the core of this report is undoubtedly the Systematic List of bird observations for 2022 and the analysis that goes with these observations. Along with the full Systematic List we have continued to provide details of the recording area, public access to the site and a short review of the year covered by the report. The latter includes

ornithological highlights along with summaries of physical and structural changes and any notable meteorological events. Previously we have found that around 10 years of data is the upper limit for many types of presentation and so we have been continuing to look for different ways of summarising the data. An outline and explanation of some of these methodologies can be found in more detail in the section “*Data Collection, Analysis and Presentation*”. This year continues the trend from last year where we have continued to trial the use of different ways to present the available data through the usual tables, but continue to use a greater number of charts and figures. The latter has given the report a slightly different appearance than past reports but hopefully without breaking the link to those reports that have gone before.

Finally, as in previous years we hope you enjoy reading the report and if you do, then we encourage you to let us know either *via* the email addresses below or even directly if you bump into us in the field! Likewise, if you did not enjoy reading it, or can think of ways of improving your enjoyment, then please let us know...especially as this may well be your last chance!

Ricky Flesher (rickyflesher2001@yahoo.com)
Peter Christian (tyttenhangerpete@hotmail.co.uk)

December 2023

Recording Area and Access

The area covered by the current report is shown in Figure 1. As indicated previously, this is an attempt to update the excellent map produced in the 1996 report and to show the current status of the area. While there are undoubtedly inaccuracies in this map it shows the general boundaries of the area considered in the report, namely, that bounded by the A414 to the west, White Horse Lane and the London Colney by-pass to the south, Coursers Road to the east and Colney Heath High Street to the north.

Access can be gained from several public footpaths that lead onto the site (see OS Explorer Map No. 182). For those arriving by car a number of access options are available. One option is to enter *via* Church Lane in Colney Heath – parking around the entrance to the Water Works. The model railway club usually meets on Sunday mornings and space can be restricted at this time. Alternatively, park at St Peter’s Church in London Colney and walk along the Colne, under the London Colney by-pass and on past the Fishing Lakes and Willows Farm. The third option is to enter on the access road for the Gravel Quarry just before the Garage on the A414 (coming from the Hatfield direction) and park at the end of this road before the entrance to the fishing lakes. Once on-site there is an extensive network of footpaths and tracks which cover much of the recording area. Observers are requested to keep to the marked footpaths to minimise disturbance to the birds, the land-owner and the quarrying operations. This is particularly so around the Main Pit and it should be noted that the workings access track is not a public right of way and that there are a number of remotely controlled security cameras along the conveyor belt with speaker’s that will tell you that you are in a restricted area! We have also been informed that if people are seen on the access track that security will notify the police. The current OS map (OS Explorer Map No. 182) should be consulted for some of the older paths that may not be shown on the map presented in Figure 1. However, please bear in mind that due to the active mineral extraction operations - on and around the site - there are frequent changes to the footpaths and rights of way.

Review of the Year - 2022

Physical features

Most of the major physical features on-site are still much as they have been in the past, however, there have been changes to the extent and nature of these features as time has gone by. First, the water level in the Main Pit is constantly fluctuating, but for the last few years has remained consistently high. The result of the latter is that the sand-spit in the Main Pit has been virtually absent for the last few years and consequently the numbers and occurrence of many species has been affected. As previously noted, the vegetation around the main pit has also continued to grow and, in the absence of any management, visibility of many areas of the pit has been affected. The reedbed on the Main Pit continues to grow and is now a significant feature providing both increased breeding opportunities in the summer and roost sites in the winter.

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Median 2001-22 ¹
Annual Rain (mm)	805.7	1014.7	740.1	727.7	726.5	776.3	857.4	900.2	805.7	707.4	897.1
Air frost (days)	55.6	24.4	29.5	43.0	40.0	37.1	37.7	26.9	51.0	34.4	40.1

¹ Data were extracted for the period 2001-21 from <https://www.metoffice.gov.uk/research/climate/maps-and-Other-Resourcesdata/uk-and-regional-series>. The latter site is no longer available and so data for the south of England from <https://www.metoffice.gov.uk/research/climate/maps-and-data/uk-and-regional-series> was used for 2022. These data were compared to the data for the period 2001-21 and found to differ only slightly, therefore, data from previous analyses were retained for those years

Weather

Overall, the weather in 2022 was typical of many years since 2001. However, there are a couple of observations this year with respect to rainfall and air-frost duration that are worth making:

- January and April were relatively dry months² but there were no months this year that could be considered atypically wet.
- Overall, the winter of 2021/22 showed slightly less days of air-frost (30.0) than the long-term median of 38.5 days. The first part of the second winter period was also mild with virtually no days of air-frost until December.

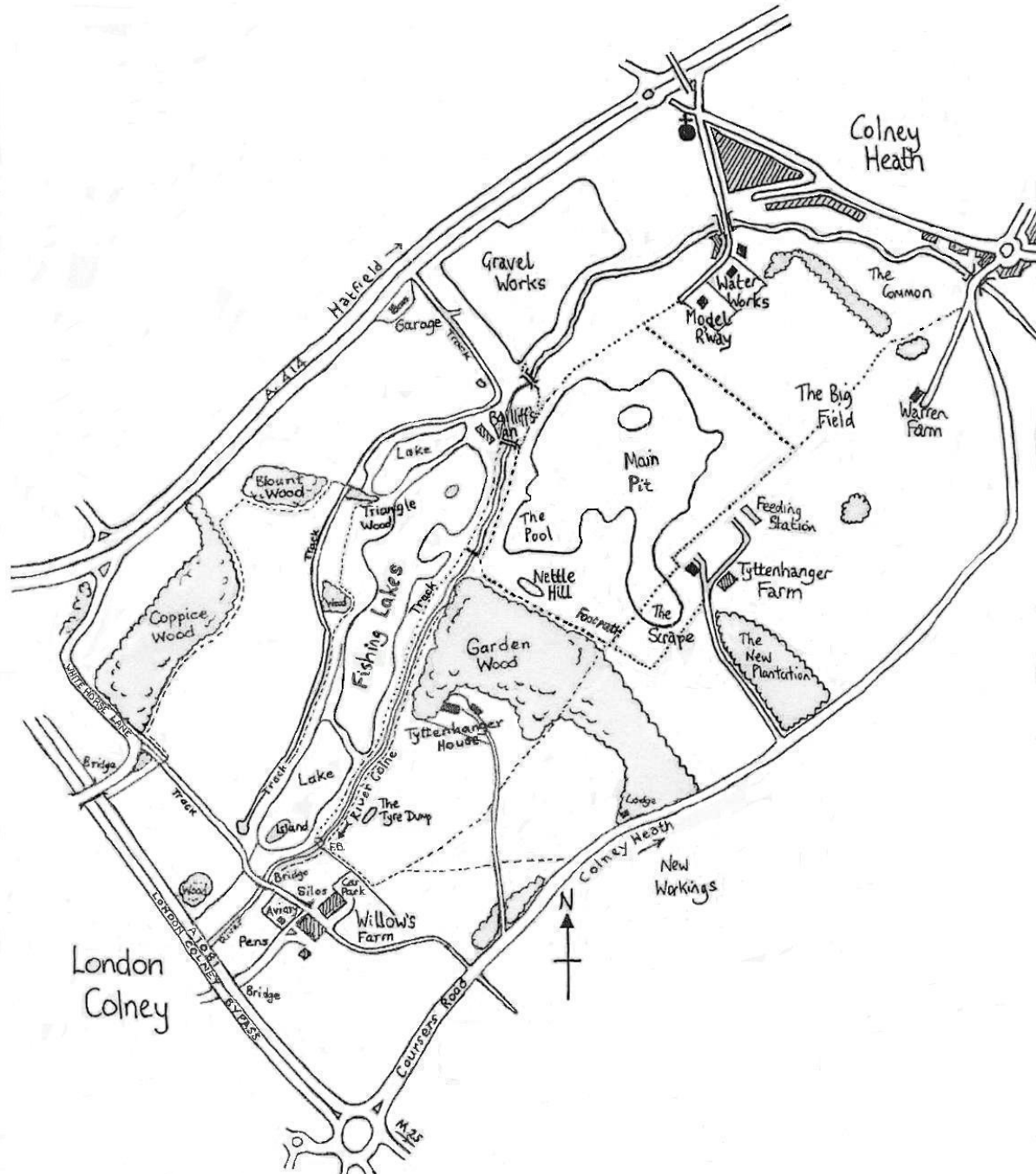


Figure 1. Map of the recording area covered in the current report. This map is a revised version of that shown in Brew (1997) and is the best representation of the situation in 2013, since when, relatively little has changed. A previous version of the map with a superimposed grid is available in earlier reports. Scale approximately 1.5 cm = 250 metres.

Coverage

Coverage of the site in 2022 was just 232 days - the lowest since 2004! Unsurprisingly, there were no months that received full coverage this year and although coverage in each month was generally lower than the long-term median (2004-22) it was the latter part of the year – from July onwards – when the coverage was especially poor. This

² Months are considered to be atypical if the relevant statistic falls outside the range of 50-200% of the long-term median value. In this instance January rainfall was 33.8% of the long-term median value and so was considered a dry month.

heterogenous and generally low coverage has several points to note:

- July, August, November and December all produced record low days of coverage while previous low-days in September and October had both been just 16 days i.e., September and October were very low also.
- The percentage coverage of the long-term mean for each of the four quarters of the year were 85.8% (Jan-Mar), 87.9% 75.5% (Jul-Sep) and 78.8% (Oct-Dec).
- The overall effect on the year is that coverage was around 82% of the long-term mean – but over 30% lower than the best year in the period 2004-22 i.e., 2018 with 324 days of coverage. As corrections for the coverage are based around the maximum rather than the mean (see “*Data Collection*”) this year was much poorer than may be indicated by the mean value!

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2022	19	18	22	26	23	16	17	17	23	20	18	13	232
Median ⁽¹⁾	23	20	26	28	24	23	26	28	24	24	22	21	278
% Mean ⁽²⁾	84.3	86.0	85.0	93.1	90.9	75.3	66.3	61.6	94.7	84.6	81.6	61.9	

⁽¹⁾ The Median for each month is calculated from the period 2004-2022 ⁽²⁾ Days of coverage in 2022 expressed as a percentage of the mean coverage for the period 2004-22.

Review of 2022 - Birding

January; the year got off to a slow start with just a single observer braving the elements and producing...”not-a-lot”; pick of the day was a **Wigeon** and 14 **Lapwings** but the 3rd saw 5 **Egyptian Geese**, 7 **Siskin** by the Fishing Lake and 2 **Tree Sparrow**. There were 35 **Siskin** on Colney Heath Common on 6th, also 2 **Yellowhammer** the 6th and a **Barn Owl** was seen by Willow’s Farm on the 9th and 18th. The 9th also produced a **Chiffchaff**, 2 **Snipe**, 3 **Water Rails**, and two **Raven** (flying over), then the 21st saw 16 **Snipe** on the Main Pit and 120 **Siskin** at Colney Heath Common. The end of the month saw an adult **Yellow-legged Gull** on the 21st, a **Peregrine** on the 22nd, three **Brambling** by Willow’s Farm Lake on the 26th along with a **Tawny Owl** calling at dusk and a **Woodcock** on the 29th in Garden Wood. The month ended with a **Great Black Backed Gull** and 17 **Lapwing** on the 30th. All-in-all a pretty good start to the year!

February; there was a **Peregrine** on the 1st, then a **Great Black-backed Gull** on Willow’s Farm Lake on the 6th, and a **Woodcock** on Colney Heath Common on 10th. A female **Stonechat** in the Maize Field on 12th, 19th, 22nd, 25th and 26th and the first **Oystercatcher** of the year on the 13th on Willow’s Farm Lake. The 13th also saw 20 **Siskin** on Colney Heath Common while two **Oystercatcher** were seen from the 18th with three on 27th. There were up to 6 **Egyptian Geese** on the 25th and 26th, with the 25th also producing a **Shelduck** on the Main Pit and 2 **Lesser Redpoll**.

The beginning of **March** saw three **Oystercatchers** on the 2nd, 11th and 19th with the established pair producing most of the other records for the month. The 2nd, 4th, 5th, 18th produce a single **Brambling** in the Maize Field with two seen on 6th and 25th. The first migrant **Chiffchaff** was seen below the High Viewpoint on the 2nd with 12 **Golden Plover** (the only ones of the year!) flying over north east, a **Redshank** was heard but not seen while there were 80 **Redwing** and a **Tawny Owl** by the waterworks. A **Shelduck** was seen on the 4th and 16th with two on 11th; two **Lesser Redpoll**, 120 **Siskin** (Colney Heath Common), a **Wigeon** on the 5th and a **Peregrine** on the 6th and 25th. The undoubted bird-of-the-year was found on the 11th - a male **Bearded Tit** heard and seen in the reedbed on the Main Pit. The **Bearded Tit** was also seen on the 12th and 14th -but could be very elusive at times! A full report of the finding of this bird can be found on page 50. There was an adult (Dark-bellied) **Brent Goose** seen at 09.00 am on the 11th which stayed until 12.22 pm before flying off. The 11th also produced a **Yellow-legged Gull** while a **Tawny Owl** was seen at roost by the Model Railway on the 13th. The first **Wheatear** for the year was seen in Car Park One by Willow’s Farm on the 15th, the first



Two’s company...three’s a crowd! Oystercatchers photographed on the 11th March. Photo courtesy of Rupert Evershed.

Blackcap was seen on the 25th and the first **Swallow** on the 27th. The month ended with the last of the winter's **Common Gull** and **Siskin** on the 25th followed by 11 **Egyptian Geese** and 2 **Tree Sparrow** on the 30th.

April saw many summer migrants arriving with the first **Sand Martin** and **Willow Warbler** (8th) **Whitethroat** and **Sedge Warbler** (14th) **Garden Warbler**, **Reed Warbler** and **Yellow Wagtail**, (15th) **Cuckoo**, (18th) **Common Tern**, (19th) **House Martin** (22nd), **Hobby** (23rd), and **Common Sandpiper** and **Lesser Whitethroat** (29th). This month also saw the last of the winter's **Fieldfare** (1st) **Redwing** (14th) while other notable records this month were 11 **Egyptian Geese** on the 1st, one **Raven** on the 2nd with two on the 29th and 5 **Wigeon** on the 3rd. The 8th produced the first of four **Shelduck** records for the year with 3 birds on the 8th, 2 on 22nd, three on the 23rd and two on the 29th and then there were 2 **Wheatear** on the 13th and a **Peregrine** on the 15th. The site saved some of the best April records for The Herts Bird Club Local Patch Big Weekend, with two records of fly-over **Whimbrel** involving 8 birds (2 and one on the 22nd and 5 on the 23rd), two **Sandwich Tern** flying through on the 23rd and a **Curlew** flying over with an adult **Yellow-legged Gull** on the 24th. A short flight away at Coursers Road the month produced a **Grey Plover** on the 27th and 28th – the pick of a number of wader records for the month that included **Ringed Plover**, **Little Ringed Plover** and **Dunlin**.

Breeding Summary 2022

As in most years of the recent past the first noted breeding activity of the year was from the small **Grey Heron** colony on the Main Pit where occupied nests (ON) were noted as early as the 12th February. March saw nesting records (ON and N) for several more species including **Jackdaw**, **Blue Tit**, **Great Crested Grebe**, **Coot**, **Magpie**, **Mute Swan** and **Song Thrush** with the first young of the year – **Grey Heron** – noted on the 28th March. The regular pair of **Oystercatcher** returned again this year and were seen displaying on the 18th March while a pair of **Wren** were seen nest-building (N) on the 24th.

April produced the first young of **Great Crested Grebe** (2nd) followed later in the month by **Coot** and **Robin** on the 22nd, as well as 4 young with the **Domestic (Greylag) Geese** on the Fishing Lakes on the same date. The **Oystercatcher** pair were nest-building (N) on the 8th while a female **Yellowhammer** was seen carrying nest-material on the 23rd.

May saw a number of other species produce their first young (FL) of the year including **Canada Goose** (1st), **Long-tailed Tit** (15th), **Mute Swan** (15th), **Grey Wagtail** (20th) and **Coot** (21st) while a **Moorhen** was reported with an occupied nest (ON). However, the stars of the month were undoubtedly the three young **Oystercatcher** that appeared on the 15th along with a brood of 3 **Pochard**. The latter is the first confirmed breeding of this species at Tyttenhanger GPs and a record that seems to have been several years in the making...hopefully it won't be the last time that this species makes it onto the confirmed breeding list! The end of the month saw the first record for the year of a **Kingfisher** carrying food/faecal sac (FF) on the 21st.

Unlike most other years, **June** saw a slight drop-off in breeding records this year (possibly the result of the very low coverage). There were further records of the **Oystercatcher** and **Pochard** broods, while **Yellow Wagtail** were noted with a probable nest (N) at Colney Heath Common (7th) and the first young of **Pied Wagtail** (10th) and **Reed Warbler** (17th) were also recorded.

July saw the first young **Whitethroat** (1st), **Tufted Duck** (1st), **Green Woodpecker** (9th), and **Mallard** (22nd) recorded along with several reports of the rapidly growing and fledging **Oystercatchers** – all three young appearing to make it through to fledging this year.

August saw things slow down (as it usually does) with **Moorhen** (6th) being the last to be added to the list of species producing young this year while there were additional broods of **Reed Warbler** and **Whitethroat** on the 6th. Finally, there was a record in **October** of recently fledged **Great Crested Grebe** – but with no further details.

In many ways this was a disappointing year for breeding records with numbers down substantially on the previous three years i.e. there were only 92 records indicating Confirmed Breeding (the lowest since 2018) compared to 387 in 2020 and 139 in 2021. In addition, there Confirmed Breeding records from just 23 species (the lowest total in the period 2004-2022) with only 18 of these seen to produce young – again the lowest total in the period 2004-22. A summary of the month-by-month distribution of confirmed breeding records and the number of species involved can be found in *Appendix 2*. Despite the overall low numbers of records and species there were nevertheless a couple of bright spots in the year:

- **Oystercatcher** breeding for the 3rd year in a row on-site and appearing to get all three chicks through to fledging.
- The first ever breeding of **Pochard** on-site.

May started well with a **Bar-tailed Godwit** flying over the main pit at 05.20 am on the 1st, the day also producing 2 **Hobby** and the first **Swifts** of the year. There was a single **Whinchat** on the 4th and 11th, a **Yellow Wagtail** and 100 **Swifts** on the 11th and four **Lesser Whitethroat** and 13 **Reed Warbler** on the 13th. There was then a couple of interesting breeding records with a brood of **Oystercatcher** (adults and 3 young) on the 15th plus the first-ever record of breeding **Pochard** on-site with a brood of 3 young also seen on the 15th. Two **Cattle Egret** seen on the Main Pit on the 20th were the second record for the site and a good end to the month. Over at Coursers Road the first of 3 **Sanderling** for the year was noted on the 20th – with further records on the 5th June and 26th July.

June saw a **Meadow Pipit** (only the 5th record in the last 19 years) and a **Shelduck** on the 8th, then on the 10th there were six **Oystercatcher's** 3 adults with 3 young, two **Cuckoo** and a **Yellow-legged Gull** before a **Green Sandpiper** was noted on the 22nd. This usually slow month then ended with 4 **Common Tern**, 20 **House Martin**, and a **Peregrine** on the 30th.

July; there was a **Yellow Wagtail** on the 1st, a family party of 4 **Grey Wagtail** (2 adults with 2 juveniles) on the 6th and a **Common Sandpiper** on the 8th. The first of three **Green Sandpiper** records was 1 on the 14th followed by 2 on the 25th and 1 on the 26th. There were 10 **Little Egret** counted on the 14th, a **Hobby** on the 16th and a **Peregrine** on the 25th and 29th. The bird-of-the-month was undoubtedly an eclipse male **Garganey** found on the Main Pit below the high Viewpoint on the 26th with squealing **Water Rail** heard from the reedbed on the Main Pit on the same date. The last notable bird of the month was a very brief **Spotted Flycatcher** by pylon corner on the 29th – the first of three records for the year. Across the road at Coursers GPs the highlight of the month was undoubtedly the **Mandarin** that bred and produced 5 young: first noted on the 26th July the young were noted until the 8th September.

August; returning **Green Sandpiper** were noted on 3 dates and passage **Common Sandpiper** on 4 dates with a single **Wheatear** seen in the car park at Willow's Farm on the 11th and 19th. Another **Spotted Flycatcher** was seen on the 12th along with a **Whinchat**, while the middle-end of the month produced a **Marsh Harrier** on the 16th, 20th and 27th with a **Peregrine** noted on the 17th, 19th, 21st, 26th, and 27th. The best bird of the month was probably the **Pied Flycatcher** seen on the 17th with other migrants including three **Yellow Wagtails** on the 19th and the last **Sedge Warbler** of the year on the 20th. Two juveniles **Garganey** on the main pit for 5 minutes on the 21st was a good record for one lucky observer followed by an early **Wigeon** on the 26th. Good numbers of **Chiffchaff** were noted from the 14th onwards with a count of 40 birds on the 27th being a site record.

September is often a great month for birding at Tyttenhanger GPs and this year showed why. A **Cetti's Warbler** appeared on the 2nd and was then reported through until the middle of December. A **Common Sandpiper** was present on the 2nd and 19th while there were three **Hobby** on the 7th. A single **Mandarin** was seen on the 2nd and 17th with two seen on the 8th. **Whinchat** passed through with two on the 2nd and one on the 3rd as did **Yellow Wagtails** (4 on the 2nd), **Spotted Flycatcher** (1 on the 9th around Colney Heath Common) and a **Wheatear** on the 16th. The best bird of the month (again) was another **Pied Flycatcher** on the 10th – making two records for the year and the second year in a row this species has been recorded! Other notable records for the month include a single **Peregrine** on the 7th and 11th, a **Greenshank** heard and glimpsed over the Back Scrape on the 14th and a **Yellow-legged Gull** on the 15th. The month continued to produce good records with two **Stonechat** on the 25th, a **Great White Egret** on the 27th and 30th which was also joined by a **Marsh Harrier** flying over the main pit on the 30th. As usual this month also saw the last of a number of summer visitors including **Willow Warbler** (7th), **Whitethroat** (16th) and **Lesser Whitethroat** (22nd) while several winter regulars also returned **Meadow Pipit** (2nd), **Snipe**, (3rd) and **Water Rail** (10th). Finally, not to be out-done, the other side of Coursers Road produced a **Ruff** on the 2nd, a **Wood Sandpiper** on the 13th and then the first of a string of **Little Stint** records with 4 birds on the 29th and 30th of the month.

October started with a juvenile **Marsh Harrier** on the 1st along with 82 **Ring-necked Parakeets**, numbers of the latter rising through the month to reach a peak of 428 birds on the 22nd! The **Cetti's Warbler** continued to be seen/heard - eight times throughout the month - while the 7th produced a count of 20 **Chiffchaffs** - doubling the previous best count for the month. The **Great White Egret** was noted on 16 times over the month and there was between 1 to 3 **Stonechats** reported on seven dates from the Amazing Maize and a **Barnacle Goose** was present on the 7th, 9th and 14th. A **Peregrine** was seen on the 7th and 22nd and **Green Sandpiper** on six dates with a maximum of 2 birds on the 16th. Also on the 16th a **Great Black-backed Gull** with two on the 18th and one on the 19th. This month also saw several of the year's migrants finally depart with **Reed Warbler** (3rd) **Swallow** (7th) **House Martin** (9th) and **Common Sandpiper** (16th) putting in their last appearances around the time that some winter visitors showed with 6 **Redwing** on the 1st, a single **Lesser Redpoll** over on the 19th, a **Siskin** on Colney Heath Common on the 19th and larger numbers (127) of **Redwing** on the 22nd.

November; The **Great White Egret** was still lingering and was noted on twelve dates this month with a gap between the 2nd and 11th, two **Cetti's Warblers** were reported on five dates between the 4th and 25th and a **Blackcap** was seen on the 4th and 18th – the first wintering birds since 2018. Four **Water Rails** were seen/heard on the 4th while there were six **Siskin** on the 11th, two **Lesser Redpoll** on the 12th and a single **Green Sandpiper** on the 13th. A **Peregrine** was seen on the 16th, 18th, 25th and 28th while a **Woodcock** flew over the pumpkin/maize field on the 18th. Coursers Road produced several notable records this month with an adult **Caspian Gull** on the 12th and then a first-winter on the 22nd, 23rd and 26th. There was also a **Shelduck** on the 25th - a very unusual record for the Colne Valley this late in the year.

December; The **Great White Egret** was noted for the last time this year on the 4th the last record for the year, while a female **Goldeneye** and 32 **Lapwings** (the maximum count for the year) were also seen on the 4th. A first-winter **Caspian Gull** on the 13th was presumably the bird seen over the road in November while the **Cetti's Warbler** was seen/heard on four dates between the 8th and 13th. A **Brambling** was in the maize field on the 9th while two flew over on the 11th. A **Peregrine** was seen on the 9th and 13th while two **Lesser Redpoll** flew over on the 11th and six **Siskin** were seen in the trees on the back scrape on the same day. The month / year ended with an adult **Great Black-backed Gull** on the 26th and two **Yellow-legged Gulls** the 27th.

All-in-all the year managed to produce 128 species – slightly better than the 126 of 2021 - which is heartening given the lower coverage i.e., 232 days compared to 246 days in 2021. The year also managed to produce a new species for the

site – the 209th – when a **Bearded Tit** was found in the Main Reed-bed on the 11th March. The following species were seen in 2022 after being absent in 2021 **Barnacle Goose, Brent Goose, Garganey, Goldeneye, Cattle Egret, Little Ringed Plover, Bar-tailed Godwit, Whimbrel, Caspian Gull, Sandwich Tern** and **Whinchat**. Conversely the following species were recorded in 2021 but not this year: **Red-crested Pochard, Black-necked Grebe, Osprey, Mediterranean Gull, Turtle Dove, Lesser Spotted Woodpecker, Tree Pipit, Redstart, Firecrest** and **Bulfinch**.

Taxonomy and Nomenclature

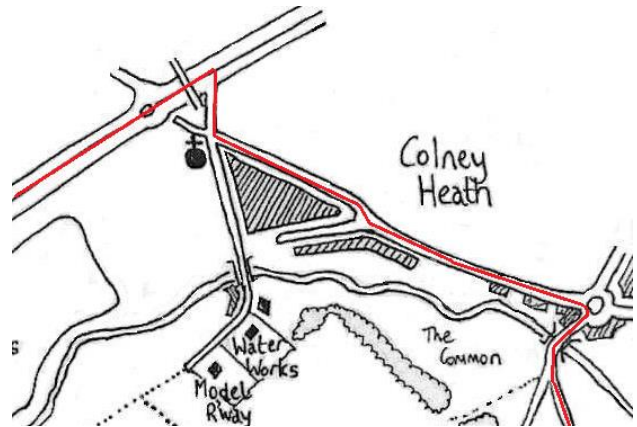
The systematic order used is similar to that used in previous reports, with the nomenclature for common names following that used in the Hertfordshire Bird Report. While the taxonomic order is slightly out of keeping with current thinking and that of other reports (most notably the Hertfordshire Bird Report) we have decided to keep close to what we have used for the last 18 years so that cross-referencing between reports is a little easier. Scientific names concur with the BOU's 10th edition of the *Checklist of British Birds*.

Submission of Records

Observers are encouraged to submit their records for the site (and for Hertfordshire generally) via the Herts Bird Club (HBC) website (<http://www.hertsbirdclub.org.uk>) Such reporting will ensure that records are passed to the County Recorder and disseminated quickly to the local birding community. Records submitted to the BTO's BirdTrack system also flow through to the County Recorder as do those from eBird; data from both these sources flow through the HBC for inclusion in the report. However, it should be noted that submission of observations through more than one of the above sources does result in duplication. Nevertheless, whatever platform(s) people choose to use we strongly encourage everybody to submit their records. Updates and the latest bird news from Tyttenhanger can also be found on the Twitter page at @TytGP.

Colney Heath Common

Also, a note about Colney Heath Common and Colney Heath. Part of Colney Heath i.e., the Common up to the High Street and bordered by the bypass to the NW and Coursers Road to the SE, has always been included in the recording area for Tyttenhanger Gravel Pits. The extent of the site is shown on the map in Figure 1 – with a detail from that map and the site boundary (in red) shown below. Further analysis of past records is still on-going and we are slowly updating our core databases to include all of the relevant records from the northern section of the common i.e., between the High Street and the river – and the section north of the river, west of Church Lane over to the by-pass.



Certainly, the inclusion of the OS grid reference in some records submitted through the Herts Bird Club website has made this task a little easier than in the past – but these data have only been included for the last couple of years and so capture of records prior to the middle of 2017 will be slightly more problematic. However, hopefully we will be able to capture all of the records for this area - traditionally monitored as part of the Tyttenhanger GPs complex - if observers are able to add a little bit more information when submitting records. As indicated previously, it would be very helpful if recorders could note in the comments when submitting records for Colney Heath, if they are from Colney Heath Common i.e., includes all of the area shown above south of the marked (red boundary). Alternatively, if records are submitted under the name Colney Heath Common, then we should be able to find a way of capturing those data as well. The other option is to enter data as Tyttenhanger GPs – but to include the note “Colney Heath Common” in the comments.

Coursers Road Gravel Pits

The recent past has seen several queries regarding the inclusion of the records from Coursers Road Gravel Pits in the Tyttenhanger report. Where appropriate, we do reference records from that site but to include them in with the Tyttenhanger records would introduce an additional level of complexity into the analysis and production of this report and its consistency with previous reports. However, we continue to mention records that are of interest from this site – especially where they clarify the status of a species across the broader Tyttenhanger GPs complex. If anybody is interested in the records from this site and/or compiling a summary for the year in future reports then they should contact the editors (last chance!).

In addition, it has become apparent over the last few years there has been “leakage” of data from Coursers Road records into the records for the core Tyttenhanger GPs site. The primary cause of this appears to be the use of eBird Hotspots (especially the one called “Main Pit”) that have been set-up with metadata that is better applied to the core recording area. While it is possible in several cases to ascribe certain records as being from the Coursers Road site, there are many for which there are no other sources of information (e.g., the Herts Bird Club Database) that allow us to exclude the records from our current analysis. Our approach has been to only eliminate records for which there is a high likelihood they refer to Coursers Road rather than “**may** be from Coursers Road.” As a result of this approach there may well be still some records retained that refer to Coursers Road rather than the current recording site. Obviously if

anybody notices records that have been wrongly ascribed to either site, then we would be more than happy to hear from you to correct the error in future reports.

Data Collection, Analysis and Presentation

Data Collection

The current report has utilised data from the Herts Bird Club database, Bird Track, eBird and from the personal records of some regular visitors. As shown in the table below, the numbers of recorders and observers has varied quite considerably over the years - with little obvious relationship between the two.

It is notable this year has seen a further fall in the number of records – albeit less than the substantial drop between 2020 and 2021. The days of coverage have also fallen again (this time to an all-time low) and this is in keeping with the general feeling that Tyttenhanger GPs is becoming a difficult site to work and less likely to produce good birds than other sites in the area. The latter is also consistent with the reduction in observer numbers that was seen this year – although it is worth noting that this year’s observer number was very similar to those in the period 2004-2015 – which means 2017-2021 were the exception rather than the rule! Factors outlined in “*Physical features*” undoubtedly explain much of the decline in general interest in the site, although the site still seems able to produce good birds from time-to-time and the extent of the site and the mixed habitat available is obviously still attractive to many species.

This year continued to see notable “leaking” of records between the Tyttenhanger GPs site and, most notably Coursers Road GPs. We have attempted to make sure that records for the latter have been extracted from the database (dB) and while this can be straightforward for species that are also reported through the Herts Bird Club website it remains tricky for the more common species. Obviously if anybody spots any obvious errors in our site-assignment then please let us know.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of Records	7,105	5,548	7,087	8,783	9,734	10,814	15,284	15,217	20,844	21,747	9,820	8,908
No. of Recorders	72	58	60	55	55	67	72	72	77	80	80	52
Days of Coverage	289	275	271	289	296	303	321	324	321	323	246	232

For data cited from prior to 2004 we have primarily used the Hertfordshire Bird Reports from the period 1983-2003³ as the primary source of data. These data have come from the main body of the text in those reports and also from the included WeBs counts (1983-2008) and those subsequently published on the Herts Bird Club website i.e., from 2009 onwards. It is worth noting that the WeBs records between 1987 and 1997 were supplemented by additional counts from the same month - if these counts were greater than those made during the WeBs survey we have made use of these data where available. Note for some records prior to 2004 reference has also been made to the Birds of Hertfordshire (Smith *et al.*, 2012).

It should also be noted that since the publication of the 2021 Tyttenhanger Report, on-going work on “The Breeding Birds of Tyttenhanger” has led to some new data becoming available – most notably from the archive database of the Herts Bird Club. We are still in the process of assimilating and standardising the format for all of the available data for the site, but have used these data, where appropriate, in the current report.

Description Species and Other Notable Records

With some of the changes in the data provided to us for the compilation of the Tyttenhanger GPs bird reports, along with some of the changes in other sources of information, we thought it timely we include a brief summary of how we deal with Description Species and other Notable Records. Firstly, we note that after the hiatus of a couple of years, the “*Rare Bird Decisions*” page of the Herts Bird Club is now up to date and meshes with the “Herts Rare Bird Panel (HRBP) Report” in the Hertfordshire Bird Report including the section of “Records not Assessed”. This allows us access to all of the records for Tyttenhanger along with the outcomes of any rarity decisions. So, with access to the relevant data the current process for dealing with Description Species and other Notable Records is as follows:

- Firstly, if the bird is a National or Herts Description Species then the first port-of-call is the “Rarer birds in Herts” page on the Herts Bird Club website or the Hertfordshire Bird Report. The decision on a particular record is usually posted on the former prior to the report being published and the Report is always taken as the final reference point. Records of Description Species that have not been assessed by the HRBP are listed in the “*Corrections and Additions to Previous Reports*” section of the report.
- Second, not all Notable Records necessarily relate to Description Species. Examples of such exceptions would be unusual dates and/or exceptional counts– especially if these also happen to be a record on-site count for those species. Again, the first reference point would be the Hertfordshire Bird Report, but in a broader, County-context,

³ The Hertfordshire Bird Report started as a stand-alone publication in 1980, however, 1983 includes the first reference we can find to Tyttenhanger Gravel Pits *pers se*. We are always interested in older records from the current recording area and would encourage anybody with records to contact the editors.

these records may not necessarily be included in the report. In such cases it has generally been the case that we contact the observer to verify that the date/number/comments are correct. This will continue as far as practicable - although contact may need to be made through the Herts Bird Club.

Finally, in previous reports the names of contributors have been included with records of Description Species and Other Notable Records. In the future this practice will not continue without the explicit consent of the observer.

Analysis

As the data made available to us comes from different sources there is a certain amount of duplication. Initial analysis for each species involves the removal of duplicated data, re-ordering and in some instances re-coding. The basic unit for most species is the Daily Maximum Count i.e., the maximum count for a particular species on a given day. Depending on the species, calculation of parameters such as number of days-recorded, monthly maxima, maximum counts and bird-days (see below for an explanation of some of these terms) are then made from the sorted data and the relevant tables and figures constructed. In some instances, we also calculate the number of unique entries that have been generated for a particular species. When this is done, entries from the same day are not removed unless they are an obvious duplication (which can occur with data entered through two different routes i.e., the Herts Bird Club website and/or BirdTrack/eBird) and entries ascribed to different observers have been retained when the latter information has been provided. We refer to this statistic as the Total Entry Number.

Statistics used.

As indicated above, the basic unit from which we work for each species is the Daily Maximum Count. The parameters calculated from the Daily Maximum Count and used in our analyses are outlined below:

Days-recorded – the number of days that a species is recorded in a given period (month, year etc.). This measure is independent of the number of individuals recorded and is used primarily for species that show little variation in the Daily Maximum Count e.g., resident species such as Grey Wagtail and Kingfisher, and those species that occur less frequently.

Bird-days – Bird-days are the sum of the Daily Maximum Count in a given period. This measure is therefore a function of not only days-recorded but also the (maximum) number of individuals recorded in a given period and is used for species that can show a large variation in Daily Maximum Count e.g., migrant species that can come through in variable numbers such as Yellow Wagtail or Dunlin. In the current report, for the analysis of some data prior to 2004 we have tended to use a conservative approach to the calculation of bird-days. This is because many of the records have been drawn directly from the Hertfordshire Bird Report where statements such as “two birds present between 19th and 29th March” are frequently encountered. In such a case, we have taken the approach that both birds were present on the 19th and 29th and at least one day in between i.e., as 10 days might warrant enough of gap to indicate separate birds/different records. Conservatively this would therefore be a minimum of 6 bird-days (2 birds, three dates) – but would only constitute a single record (if we believed all sightings had a high probability of being the same birds).

In addition to the above statistics generated from the Daily Maximum Count, we also occasionally calculate the following parameters – Records and Total Entry Number.

Records – this is a term we have tried to avoid over the last few years as there has been some confusion as to what a “record” may entail. For the purposes of this report we have used the term “record” to refer to any series of sightings for which we believe there is a high probability that the same bird(s) was/were involved in each sighting and/or was probably continuously present on-site, and/or frequently on-site during the period of observation. This definition sounds quite vague – and wordy - but rather than lose some records in any subsequent analysis, the above provides a convenient way of still using the data. For instance, a species may be referred to in the Hertfordshire Bird report as “2 birds present in April and May”, and so with the definition above we would still be able to show two birds present in both of these months even though other details are lacking. Note, as outlined above under “Bird-days”, long-staying birds are treated as a single record – irrespective of the total number of days they were present.

Total Entry Number – this is occasionally calculated for a given species/month etc and is generated from all individual entries for that species after the removal of obvious duplicates i.e., is effectively the number of independent entries into the database. While it is an overestimate of the relative abundance of a species, it sometimes offers insights into the way that species have (or have not) been reported through time.

Significant Counts. For most species it is useful to have an indication of not just the maximum/record count, but also of what constitutes a significant or notable count. For most species we have taken the 95th percentile of the Daily Maximum Counts as the lower boundary for determining significant counts⁴ i.e., the highest 5% of Daily Maximum Counts are generally considered to be significant. This information is included with the summary data for most species – which is more fully explained in the section below entitled “Presentation.”

Measures of Centrality, for some data e.g., spring arrival dates, monthly maxima or daily maximum count it is sometimes useful to have an estimate of the “average” or “middle” point for those data over the period of reporting/across all of the available data. The following are therefore used as indicators of the “middle” of the data:

⁴ Where the Daily Maximum Count has only indicated that the species is “present” i.e., no count was made, then these values (generally coded as zero) are not generally included in the analysis.

Mean – the numerical average of the data available. We have generally tended to avoid this measure as it can be very susceptible to outliers e.g., a very late arrival date for one year or an exceptional count will skew the parameter significantly. However, in some instances it is a useful measure and so it is occasionally used.

Median - when the number of data points is small (and 19 years of data is still a relatively small amount of data!), the median is an alternative measure to the mean (or average) to indicate a measure of the centre-point of the data. The median is useful when there may be outliers in the data that can skew the mean and therefore bias the mid-point of the data. We have generally tended to use this measure in the current report in preference to the mean.

Arrival and Departure Dates – for the regular summer and winter visitors, arrival and departure dates are routinely presented in tabular form and in some instances, median dates are calculated from these data (see Appendix 1 for a summary of all species-data). The median is less sensitive to large differences in the data e.g., when there are no autumn records for a summer migrant then a late spring date is effectively shown as the “latest” departure date. However, to reduce the impact of such data these values are usually removed when calculating median arrival/departure dates. As a guide the following criteria are generally used to define the beginning and end of the migration periods for summer and winter migrants:

Summer Migrants - Spring Arrival - before June 30th.

Summer Migrants – Autumn Departure– after June 30th.

Winter Migrant – Spring Departure – before April 30th.

Winter Migrant – Autumn Arrival – after July 31st.

Where possible we have been back and analysed the available data to ensure that the above assumptions are not massively incorrect and/or unsupported by the data. Where such cases are identified the alternate dates/values are mentioned specifically in the text for that species and are included in the header-summary (see below under “Presentation”).

Standardization of Data.

For some analyses we have employed methods that attempt to standardise the data to take account of the many idiosyncrasies around the way that various observers do, or don't, record particular species, and for the natural variation that arises from large agglomerated datasets such as those available for Tyttenhanger. These standardisation methods are basically of two types;

Observer based – Originally developed for the common birds of prey, to provide standardisation between years and account for reporting biases, we have used the records from a frequent observer to calculate the reporting frequency for that species. We have extended this slightly over the years to other species e.g., Kingfisher and Bullfinch, and have continued to make use of this approach for several species.

In the more recent past we have also begun using a parameter termed Reporting Rate (%) i.e., number of days-recorded/total days of coverage – expressed as a percentage. This parameter has been used to try and gain further insights into patterns of occurrence - although this is the first year that we have used this value in the body of report. We have also used this parameter further in the discussion that can be found on page 57 of the apparently exceptional 2020 – see Appendix 3 - “How Good was 2020... Really?”

Coverage Based – as can be seen in the table provided in the sections “Review of The Year” and “Data Collection” coverage is not consistent across years and/or through any given year. For this reason, we have occasionally used the relative coverage for each month to standardise the data. In this case the ratio of the coverage for a given month against the month with the lowest recording rate (February) is used to standardise the data. This type of correction has been used particularly for those analyses where at the relative number of days-recorded from each month of the year is of interest.

It is notable this year saw a significant reduction both the numbers of days of coverage and also in the total number of records submitted. Because of this we have been more cognisant of the possible effects this may appear to have on some species and have tried to highlight this where it appears to be a factor in the records/occurrence of those species. For the purposes of these analyses we have used the following correction factors for the years from 2004-22. The index year (for which a value of 1.00 is assigned) was 2018 i.e., the year with the best coverage in the period 2004-22 (324 days).

2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014				
1.36	1.24	1.17	1.17	1.19	1.20	1.13	1.12	1.18	1.20	1.12				
							2015	2016	2017	2018	2019	2020	2021	2022
							1.09	1.07	1.01	1.00	1.01	1.00	1.32	1.40

We realise that the above may not be appropriate for all species especially those that are only present at particular times of the year e.g., summer migrants or winter visitors that effectively disappear for half of the year. Nevertheless, in the current year, as with 2021, where days of coverage were so much lower than the last few years, we have used the above

corrections while we continue to work on more refined versions for our final report. Nevertheless, it is worth noting (see “Coverage”) that:

- Coverage in most months was lower in all months than the 2004-2022 median,
- Coverage in June, July and August was particularly low – the latter two months being less than 70% of the 2004-22 mean. The 17 days coverage in July and August were both record lows – beaten only by December with just 13 days-covered (which is just 61.9% of the long-term mean!).

Breeding Records.

Around 30 species undoubtedly breed, or attempt to breed on-site, each year - although in many cases there are few data to indicate their success. For the purposes of this report (and those of previous years) we have attempted to separate “Possible Breeding” from “Confirmed Breeding” – and have generally focussed our reporting on the latter term wherever possible. Towards this end the following criteria are used to designate “Confirmed Breeding.”

- Adult seen carrying food and/or faecal sac to/from a nest (FF)
- Young birds in the nest (NY)
- Adults and newly fledged birds seen together (FL)

The above also indicates the BTO codes (in brackets) for each of the criteria. It is worth noting that the BTO also include several other codes for confirmed breeding (Used nest/eggshells (UN), Distraction display (DD), evidence of an occupied nest (ON) and a nest with eggs (NE)) which we would consider on a case-by-case basis for demonstrating confirmed breeding. Finally, it should also be noted that with presence of newly fledged birds (FL) the possibility exists for many species that these birds may have bred off-site and so this caveat is applied to these observations - where appropriate.

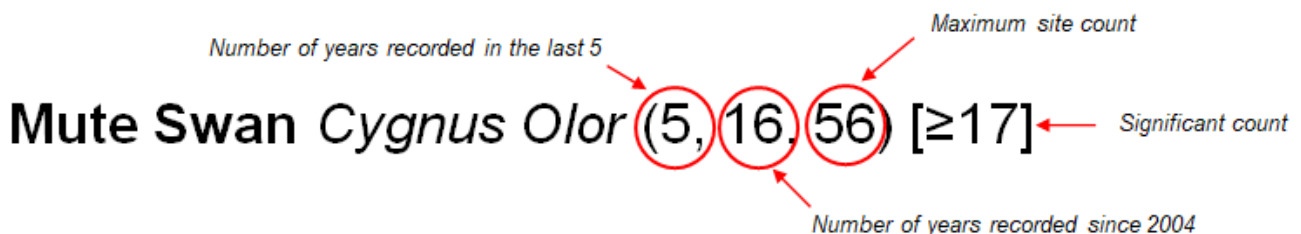
Finally, a request regarding breeding records. It has become apparent in the last couple of years that there are some limitations around the way that breeding records are captured through BirdTrack and eBird and the codes that are available for noting the presence of young birds. In both instances the code that applies to young birds is FL i.e., recently fledged young (the full description of the application of the term as indicated in BirdTrack is shown below). While a single code such as this is useful for broad-scale mapping of breeding status, for smaller scale inferences such as “how many pairs bred at Tyttenhanger this year?” it can be very difficult to interpret those entries reported as FL. For this reason, we suggest that wherever possible observers also insert a comment with the entry to indicate if this is a newly hatched brood or a larger brood. It should also be mentioned here that it is also useful to indicate if the count includes young birds or not.

FL	Recently FL edged young (nidicolous species) or downy young (nidifugous species). Careful consideration should be given to the likely provenance of any fledged juvenile capable of significant geographical movement. Evidence of dependency on adults (e.g., feeding) is helpful. Be cautious, even if the record comes from suitable habitat.
-----------	---

Presentation

Hyper-links. We have been using hyper-links to websites for several years now but this is the first year in which we have added hyper-links for navigation within the report itself. As a guide, links to external sites are shown in the normal way i.e., as underlined text while links within the document are generally indicated by italic text in quotation marks e.g. a link to Mute Swan will be shown thus “*Mute Swan*” (and yes, this one works!).

Species Summaries. Further to previous years the systematic section of the report shows (as demonstrated below) the scientific name of each species followed by three numbers, with the addition this year of an additional element. The three numbers that follow the scientific name represent the “Number of years the species has occurred in the last 5 years”, “Number of years the species has occurred since 2004 and the” Maximum on-site count”.



The number/text shown in square brackets that indicates what constitutes a significant count (as described above in “Data Collection, Analysis and Presentation – Statistics used”). As there are insufficient records/counts for many species to make this statistic meaningful, other text may be included in this box – which is explained below:

- [≥17] – indicates that counts of 17 or more birds are considered statistically significant.
- [All] – all records of this species are considered notable.

Following the header line is a summary of the species’ status at Tyttenhanger. This summary is presented in italics and provides various information on the overall status of the species, expected patterns of occurrence and an indication of

what records can be considered significant. Examples of this summary text is shown below for Common Tern and Bullfinch – with further clarification of those informational elements presented below the examples.

Common Tern *Sterna hirundo* (5, 15, 30) [≥ 17]

Regular summer visitor that has regularly attempted to breed in the past - but not always successfully. Median arrival date (2004-19) 11th April; median departure date (2004-19) 4th September; any breeding records are notable.

Bullfinch *Pyrrhula pyrrhula* (5, 15, 12) [≥ 4]

Resident, probably breeds in most years. Most commonly reported in the winter months, often in small flocks; only 42.6% of counts relate to single birds.

The first part of the summary (shaded in grey) describes the overall status of the species – including the breeding status. Resident species are described as such, and the initial statement about the relative abundance/frequency of occurrence for non-resident species can be summarised as follows:

- *Common visitor* – can be found on-site on most visits. Many species may also be described as “*Common resident/visitor*”.
- *Regular visitor* - occurs in all/virtually all years.
- *Frequent visitor* – occurs more than twice a year on average – but still may not occur in some years.
- *Irregular visitor* – occurs on average once or twice in most years.
- *Infrequent visitor* – has occurred more than three times but less than one record per year on average.
- *Rare visitor* – has occurred on less than three occasions.

The second element of the summary (shaded in green – if present) indicates the median arrival and departures dates for migrants/visitors. Many of these arrival/departure data were previously included in the text-tables but have now been migrated to Appendix 1 where the raw data along with latest/earliest dates and the median values are presented.

The third element of the summary (shaded in purple above) indicates notable counts and/or records for the species. Note, this feature was added for the 2019 report – the first report for which fully digitised data were available for the period 2004-19. The availability of fully digitised records meant that values such as these, can be more readily calculated and updated.

Summary Tables. As previously mentioned, the data now available is more than the maximum “carrying capacity” for many of our tables and, in many instances, alternative approaches to summarising the data have been sought. As far as alternatives are concerned, we have previously focussed on updating tables to include at least 10 years of data along with the minimum, maximum and median values (where appropriate/relevant) for the period from 2004 to the present. We have continued to modify our approach to many of the “annual tables” that provide the following in various combinations:

- A summary column for the period 2004-10/11 (inclusive) as the amount of data no-longer allows for these years to be included separately; this intermediate approach has been taken in a number of instances.
- Median and maximum and/or minimum data for the period 2004-22, along with data for as many years as possible.

The above approaches to summary tables were originally devised to keep the number of pages in the report to a minimum i.e., assuming that most people would print a hard-copy version. More recently we have also tried to standardise tables to achieve both an acceptable publication-size and some degree of continuity in the presentation. However, as printing hard-copies appears to be happening less and less, the desire to keep the number of pages to a minimum is decreasing. So, while we would not wish to see the size of the report increase too much, we are aware that the use of figures rather than tables provides a better summary of the data in many cases. However, this does increase the overall size of the report – which we hope is not more than most readers will find acceptable. We certainly hope that if you have any feedback on this issue you contact the editors and let them know your thoughts.

Corrections and Additions to Previous Reports

Additions and changes to previous reports are included in the body of the Systematic List. These are highlighted by the category of amendment (i.e., correction of addition) and the year of the record being shown in bold and are included at the end of the relevant 2022 text.

References

The following includes hyperlinks to previous reports - these are shown in bold where available. If you have any trouble obtaining any of these reports then please contact the editors of this report for copies and/or further information.

Brew, M. (ed) (1997) Tyttenhanger Gravel Pits Bird Report for 1996.

Christian, P. Flesher, R. and Knight, G. (2006) Tyttenhanger Gravel Pits Bird Report for 2004 (Available on request from the authors of the current report).

- Flesher, R. and Christian, P. (2017) Tyttenhanger Gravel Pits Bird Report for 2015.
(<http://www.hnhs.org/sites/default/files/downloads/reports/Tyttenhanger%202015.pdf>).
- Flesher, R. and Christian, P. (2019) Tyttenhanger Gravel Pits Bird Report for 2016 and 2017.
(<https://www.hnhs.org/sites/default/files/downloads/reports/Tyttenhanger%202016%20%2B17.pdf>).
- Flesher, R. and Christian, P. (2020). Tyttenhanger Gravel Pits Bird Report for 2018.
(<https://www.hnhs.org/sites/default/files/downloads/Tyttenhanger%20Report%202018.pdf>)
- Flesher, R. and Christian, P. (2021). Tyttenhanger Gravel Pits Bird Report for 2019.
(<https://www.hnhs.org/sites/default/files/downloads/Tyttenhanger%20Report%202019%20%281%29.pdf>)
- Flesher, R. and Christian, P. (2021). Tyttenhanger Gravel Pits Bird Report for 2020.
(<https://www.hnhs.org/sites/default/files/downloads/Tyttenhanger%202020%20Report.pdf>)
- Flesher, R. and Christian, P. (2023). Tyttenhanger Gravel Pits Bird Report for 2021.
(<https://www.hnhs.org/sites/default/files/downloads/Tyttenhanger%20GPs%20Bird%20Report%202021.pdf>)
- Flesher, R., Christian, P. and Blake, S. (2010) Tyttenhanger Gravel Pits Bird Report for 2008
(<http://www.hnhs.org/uploads/file/Local%20reports/Tyttenhanger%20bird%20report%202008.pdf>).
- Flesher, R., Christian, P. and Blake, S. (2011) Tyttenhanger Gravel Pits Bird Report for 2009
(<http://www.hnhs.org/uploads/file/Local%20reports/Tyttenhanger%202009%20Report%20v5.pdf>).
- Flesher, R., Christian, P. and Blake, S. (2012) Tyttenhanger Gravel Pits Bird Report for 2010
(<http://www.hnhs.org/uploads/Tyttenhanger%202010%20v7.pdf>).
- Flesher, R., Christian, P. and Blake, S. (2013) Tyttenhanger Gravel Pits Bird Report for 2011
(<http://www.hnhs.org/kcfinder/upload/files/Tyttenhanger%202011%20Cute2.pdf>).
- Flesher, R., Christian, P. and Blake, S. (2014) Tyttenhanger Gravel Pits Bird Report for 2012
(<http://www.hnhs.org/kcfinder/upload/files/Tyttenhanger%202012%20v4.pdf>).
- Flesher, R., Christian, P. and Blake, S. (2015) Tyttenhanger Gravel Pits Bird Report for 2013 – 10th Anniversary Edition.
(<http://www.hnhs.org/sites/default/files/downloads/reports/Tyttenhanger%202013%20Final.pdf>)
- Flesher, R., Christian, P. and Blake, S. (2016) Tyttenhanger Gravel Pits Bird Report for 2014.
(<https://www.hnhs.org/sites/default/files/downloads/reports/Tyttenhanger%202014%20%20report.pdf>).
- Flesher, R., Christian, P. and Knight, G. (2008). Tyttenhanger Gravel Pits Bird Report for 2006
(<http://www.hnhs.org/uploads/file/Local%20reports/Tyttenhanger%20bird%20report%202006.pdf>)
- Flesher, R., Christian, P., Knight, G. and Blake, S. (2009) Tyttenhanger Gravel Pits Bird Report for 2007
(<http://www.hnhs.org/uploads/file/Local%20reports/Tyttenhanger%20bird%20report%202007.pdf>)
- Hertfordshire Natural History Society, Hertfordshire Bird Club. The Hertfordshire Bird Reports 1980-2021. The 2021 Report is referenced herein as “HBR, 2021” – Trans. Herts. Nat. Hist. Soc. (2022) 54 (2).
- Knight, G., Flesher, R. and Christian, P. (2007) Tyttenhanger Gravel Pits Bird Report for 2005. (Available on request from the authors of the current report).
- Smith, K.W., Dee, C.W. Fearnside, J.D., Fletcher, E.W and Smith, R.N (1993) The breeding birds of Hertfordshire. Hertfordshire Natural History Society.
- Smith, K.W., Dee, C.W. Fearnside, and Ilett, M. (2015) Birds of Hertfordshire. Hertfordshire Natural History Society.

Other Resources

The Tyttenhanger GPs site continues to have up-to-date information and news available through its web presence. Apart from the Herts Bird Club website (<http://www.hnhs.org/birds/index.php>) there are now other sources of recent information on Tyttenhanger's birds most notably the Tyttenhanger Twitter account at @TyttGP .We urge you to check all of these resources for up-to-date information and further site and bird information. There is also a more general Facebook page for all things relating to Tyttenhanger Gravel Pits (www.facebook.com/groups/tyttenhangergps).

For those of you that may be interested in older records and previous Bird Reports we would recommend the following sites:

Hertfordshire Bird Report - <https://www.hnhs.org/content/journals-archive> - Copies of all of the Hertfordshire Bird Reports from 1981 through until 2009 are currently available. Older reports are also accessible but a little trickier to find as they were not stand-alone publications.

London Bird Report – <https://www.biodiversitylibrary.org/bibliography/174597> - Reports back to No. 1 (1922) are available through the Biodiversity Heritage Library – the last available being the 2015 report. It is worth noting that the term “Tyttenhanger GP” not in use before 1983 so older records for the site are difficult to find.

In addition to the above links to older bird reports, access to a limited number of older versions of the Herts Bird Club website are available through the Internet Library's “**Wayback Machine**”-

<https://web.archive.org/web/20020604150537/http://www.hertsbirdclub.org.uk:80/>

Contributors and Acknowledgements

This report would not have been possible without the records that observers have made available to the broader birding community and so first thanks must go to them. A large debt of thanks is also due to Alan Gardiner and Graham Knight who made available the Tyttenhanger records from the Herts Bird Club database and BirdTrack/eBird – without which there would have been many serious “gaps” in the current report. Thanks also to Marcus Brew for permission to use vignette of the Sand Martins (previously the cover illustration for the 1996 and 2004 reports); photographs are individually acknowledged where this has been requested by the contributor. Contributors of records in 2022 were as follows:

James Allaway	Dan Fletcher	Chris Leonard	Chris Ruis
Jeff Bailey	Tony Gammage	Alex Lewis	Stuart Smith
Michael Bird	Alan Gardiner	Clare Lickfold	Terry Smith
Steve Blake	Jeff Gooding	Gary Mason	Clifford Smout
David Booth	Clive Harding	Andrew Miller	Tom Speller
Steven Brown	Stephen Harris	Gregor Murray	Andrew Steele
Paul Chapman	Geoff Horn	Ian Murray	Jane Storr
Anthony Clancy	Steve Hughes	Richard Parlour	Mark Taylor
Andy Day	Michael Kings	William Paterson	Matthew Taylor
Simon Errington	Axel Kirby	Val Payman	Ronald Taylor
Lee Evans	Matthew Kirkland	Steven Pearce	Tyttenhanger Birders
Rupert Evershed	Robert Kitchen	Rupert Pyrah	Simon West
Ricky Flesher	Samuel Lawrie	James Reader	Geoff Young

The above was compiled from the names provided by the Herts Bird Club – which in turn were extracted from their own website and from BirdTrack and eBird. Apologies if you submitted records for 2022 and your name doesn't appear on the above list - but please let us know so we can try and ensure it doesn't happen in the future! Likewise, if you would prefer that your name not be included in future reports then we would encourage you to contact us and/or the Herts Bird Club.



It has been several years since Common Terns have bred on-site despite some early-season displays. Photo courtesy of Simon West.

SYSTEMATIC LIST

Mute Swan *Cygnus olor* (5, 19, 56) [≥ 17]

Resident through much of the year and generally breeds in small numbers (1-2 pairs), the first recorded breeding was in 1996.

A reasonable breeding year with two broods of 2 (Fishing Lakes/Deep Lake) and one brood of 3 (The Scrape) with the first young being noted on the 15th May. From the records submitted it appears that fledging-success was reasonable with 3 first year birds reported on 9th October. Aside from breeding, numbers were relatively low this year with several months showing below the median value for the period 2004-22. The maximum for the year (13 on the 13th March) was a little better than the 11 of 2021, but still much lower than most other years. A summary of monthly maxima data from the last 19 years is shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	7	6	13	9	7	8*	10*	7	10	10	8	4
Median 2004-22	8	6	6	8	10	9	9	8	11	11	9	13
Maximum 2004-22	18	23	25	15	18	22	20	24	30	24	28	26

* Includes young birds

Greylag Goose *Anser anser* (5, 19, 70) [≥ 30]

Birds of presumed feral origin have become regular visitors in the recent past; there have also been some associated records of confirmed breeding.

Days-recorded this year (79) showed an increase over 2021 (41) despite the slight overall fall in coverage. There were 11 significant counts this year with 10 of these being in October (4) and November (6) with a maximum count of 37 birds on 27th August, 7th October, and 13th November. All-in-all this was a good year for this species. A summary of data from the period 2010-22 is shown in the table below.

	2010*	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	87	56	60	64	58	83	109	126	104	107	96	41	79
Counts ≥ 30	0	0	2	1	0	0	16	25	10	3	0	1	11
Count ≥ 10	43	7	21	28	19	23	60	75	70	40	22	13	49
Maximum	20	17	30	28	27	19	38	70	50	45	20	30	37

* The period from 2004-09 produced a total of 64 days-recorded, no counts of ≥ 30 , 11 counts of ≥ 10 and maximum of 23.

Brent Goose *Branta bernicla* (1, 4, 48) [All]

Infrequent visitor.

A single bird flew in from the North on 11th March at 07.42 am with Canada Geese and landed on the Fishing Lake. The bird left, flying north, at 13.02 pm - leaving many locals unable to connect! This is the 7th record for the site and the first since 2014.

Barnacle Goose *Branta leucopsis* (3, 13, 12) [All]

Increasingly infrequent visitor with birds probably coming from the Category C population in Bedfordshire.

A single bird appeared on the Fishing Lakes with a flock of Canada and Greylag Geese on the 7th October. It was seen again on the 9th and 14th October – these three dates constituting the first record since 2019.



Brent Goose photographed on the 11th March. Photo courtesy of Rupert Evershed.

Canada Goose *Branta canadensis* (5, 19, 449) [≥ 150]

Common resident/visitor throughout the year with large moulting flocks generally present in the autumn. Breeds on-site in most years with around three pairs being typical.

A good breeding year for this species with six broods noted in May (five in 2020 and four in 2021). Breeding aside, monthly maximum counts were mixed, with eight months above the long-term median (2004-22) and 4 months below. The maximum count was of 330 birds on the 2nd September – the first count of over 300 birds since 2017. A summary of monthly maxima data for the period 2004-22 is presented in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	127	120	71	63	50*	20	19	102	330	154	74	50
Median 2004-22	66	57	50	24	43	50	68	196	220	90	72	51
Maximum 2004-22	180	150	80	63	62	106	100	449	400	315	250	150

* Includes young birds

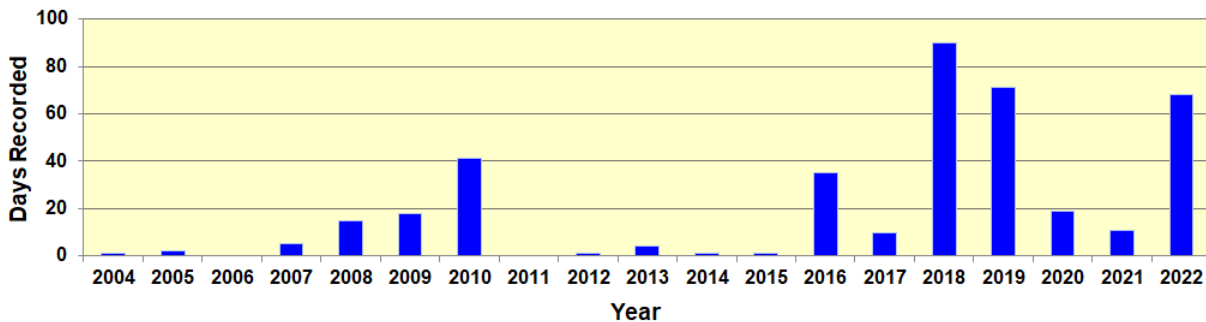


Figure 2. Days-recorded for Egyptian Goose *Alopochen aegyptiaca* in the period 2004-22.

Egyptian Goose *Alopochen aegyptiaca* (5, 15; 11) [≥5]

Infrequent visitor, becoming more regular. Can occur in all months of the year with counts of 5 or more birds being significant but all records are currently considered notable.

What a turnaround-year for this species! Previously in a downward trend from 2018 (90 days recorded) to 2021 (11 days-recorded) this year saw 67 days-recorded, 257 bird-days and a maximum count of 11 birds on the 30th March and 1st April – a record count for the site. However, whereas other years have produced more days recorded (2018 with 90 and 2019 with 71) both of these produced just single significant counts i.e., 5 birds or more, whereas this year produced a total of 22 – more than all other years together! A really exceptional year for this species...which may even become a breeding species in the near future?

Mandarin Aix *galericulata* (5, 14, 4) [All]

Irregular visitor, becoming more regular; all records are notable.

It was a reasonable year for this species with a record involving two birds on the 8th September on the Main Pit and a single bird (female/juvenile) noted on 17th September.

Coursers Road. While Tyttenhanger managed just two records for the year, just over the road this species was frequently recorded between the 24th April and 3rd September with a brood of 5 youngsters being reported first on the 16th July (3 ducklings rising to 5 on the 22nd) through until 15th August.

Shelduck *Tadorna tadorna* (4, 18, 12) [All]

Previously a regular visitor (in small numbers) that has also bred in several years. Historically counts of ≥4 are statistically significant but a recent decline in numbers means that all records are currently considered notable.

Frequently recorded at Coursers Road it seems that birds strayed across to Tyttenhanger GPs on four occasions this year (numbers in brackets) - 16th March (1), 22nd April (2), 23rd April (1), 8th June (1).

Coursers Road. Birds were recorded across the road on 76 dates from the 13th February until 26th November Breeding was confirmed on the 19th May with 2 adults and 7 ducklings reported, increasing to 9 ducklings on 21st May. At least six of the young were fully fledged when last reported on the 1st July.

Mallard *Anas platyrhynchos* (5, 19, 250) [≥83]

Common breeding resident present throughout the year. Birds were also released for wildfowling in the past, but this practice has now ceased.

Breeding was poor this year with just a single pair appearing to produce 3 young - and these being of doubtful provenance i.e., recorded as “female with 2 normal young and one white” on the 22nd July. Maximum counts in all months of the year were well below the long-term (2004-22) median and the maximum count for the year was just 70 birds on the 21st August. Summaries of monthly maxima data for the current year and the period 2004-22 are shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	20	18	16	16	14	4	4	70	30	40	25	8
Median 2004-22	58	50	27	27	49	54	40	70	64	67	67	85
Maximum 2004-22	168	101	83	81	92	120	105	193	250	152	146	165

* Includes young birds. Cells shaded blue are record low-counts for that month in the period 2004-22

Garganey *Anas querquedula* (2, 7, 2) [All]

Infrequent visitor; all records are considered notable.

Two records for the year makes this a relatively good year for this species. Both records were in the autumn and of an eclipse male flying over the High Viewpoint on the 26th July and then 2 juveniles for 15 minutes on the main pit on the 21st of August before heading off east. These two records represent the 6th and 7th occurrence for the site since 2004 and are unusual as 5 of the previous 7 occurrences related to birds that stayed for more than a day.

Teal *Anas crecca* (5, 19, 120) [≥ 39]

Frequent visitor and passage migrant. Highest numbers usually observed in the first winter period/early spring and often absent in the period from May to July inclusive and all counts from this period are considered highly significant.

Although the number of days recorded this year (88) were slightly up on 2021 (84) this year saw considerably more birds than 2021 i.e., average number of birds per day recorded (Ave. count) was 11.1 compared with 6.6 in 2021 and there were 6 significant counts compared to none in 2021. However, this increase was not evenly distributed through the year with good numbers in January but then relatively low numbers from February through to September - with no obvious spring passage and birds failing to over-summer for the first year since 2019. The latter part of the year produced good numbers (despite the low coverage) with December recording the highest count of the year with 100 birds on the 8th - which was also a record for the month. Summaries of monthly maxima for the period 2004-22 are presented in the table below while the second table shows a range of other summary statistics for the period 2011-22.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	50	12	10	8	0	1	1	8	17	55	30	100
Median 2004-22	30	27	26	8	1	2	2	8	17	22	17	24
Maximum 2004-22	76	120	62	50	10	5	29	25	59	62	88	100

Record counts for a month are highlighted.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	79	74	77	99	96	108	125	134	128	142	84	88
Counts ≥ 39	0	0	0	2	0	3	17	34	18	9	0	6
Ave. count	4.9	6.8	9.6	10.7	5.6	11.4	17.9	23.8	17.0	10.5	6.6	11.1

Gadwall *Mareca strepera* (5, 19, 117) [≥ 40]

Recorded all through the year but breeding is sporadic.

After last year's excellent breeding season (4-5 broods), it is somewhat disappointing there was no confirmed breeding this season despite numbers remaining relatively good throughout the year. Monthly maxima were generally above the long-term median values (with the exception of May, June and December) and the numbers of birds were generally higher than in 2021 i.e. the average count for the year (bird-days/days-recorded) was 13.0 compared with just 8.2 in 2021 - but were still well below the peak values of 2017-18. The maximum count for the year was of 64 birds on the 30th and 31st October. A summary of monthly maxima data for the period 2004-22 is summarised in the table below while below that are a summary of some other data from the period 2011-22

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	30	20	30	14	4	13	30	50	46	64	35	8
Median 2004-22	20	14	18	9	7	14	15	23	16	18	10	16
Maximum 2004-22	64	64	61	50	14	52	75	62	100	117	107	66

* Includes young birds

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.*	122	86	111	133	138	135	163	138	150	197	171	126
Counts ≥ 40	0	0	0	0	0	1	48	42	24	13	1	7
Ave. count	7.0	5.0	5.2	7.3	8.3	8.5	26.6	27.7	17.0	15.9	8.2	13.0
Breeding**	No	No	Yes(1)	Yes(2)	No	Yes(1)	Yes(1)	No	Yes(1)	No	Yes(4)	No

*Days-recorded are corrected for days of coverage. ** The number of breeding pairs that produced young are shown in brackets.

Wigeon *Mareca penelope* (5, 19, 77) [≥ 11]

Usually occurs in small numbers through the winter months with additional passage migrants in spring and autumn. Generally absent between early April and late August - all records between 13th April and 15th August are considered significant.

With just 14 days-recorded for the year, overall (even compensating for the relatively low coverage this year) this was the worst year for this species since 2012. However, there were a couple of bright spots; the year's maximum count of 5

birds on the 3rd April was also a maximum count for the month in the period 2004-22 and the single bird on the 26th August was a good record for that month. However, numbers at the end of the year were particularly and the blank in October was the first for the period 2004-22! Summaries of monthly maximum data for the period 2004-22 are presented in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	1	0	2	5	0	0	0	1	3	0	1	1
Median 2004-22	5	2	2	0	0	0	0	0	5	6	3	4
Maximum 2004-22	44	7	10	5	3	6	6	10	16	21	12	33

Shoveler *Spatula clypeata* (5, 19, 62) [≥30]

Commonly encountered spring migrant and winter visitor; has bred once on-site (2007) in the period 2004-22 despite the regular presence of birds in the summer months.

With 104 days-recorded, a total of 659 bird-days and a maximum count of 40 birds (28th January), this was an improvement on 2021 (respective figures of 97 days-recorded, 530 bird-days and a maximum of 21) but still well short of the figures for the period 2016-2020. This year also showed a drop from the last several years in the numbers of birds observed through the May-July window and it is therefore not surprising that there were no confirmed breeding records. Summaries of monthly maximum data for the period 2004-22 are presented in the table below while the second table shows a range of other summary statistics for the period 2011-22.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	40	11	10	17	2	1	1	4	15	27	20	6
Median 2004-22	12	10	13	14	2	2	2	5	5	7	13	10
Maximum 2004-22	62	53	60	28	4	9	14	11	29	40	61	40

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	58	59	72	102	103	108	109	102	121	157	97	104
Bird-days	134	343	763	622	452	1164	1652	1628	1656	1461	530	659
Counts ≥30	0	0	8	0	0	9	21	21	19	8	0	2

Goldeneye *Bucephala clangula* (2, 12, 5) [All]

Irregular/infrequent visitor that has previously produced some long-staying birds - most notably in 2009/10 and 2019/20.

A female was seen on the Main Pit from 11.00 am till 12.30 pm for 90 minutes on the 4th December

Tufted Duck *Aythya fuligula* (5, 19, 95) [≥38]

Relatively common resident and winter visitor that breeds in most years. Most significant counts are generally made in the first quarter of the year (January-March).

While many waterfowl seem to be struggling this year when compared to the recent past, this species seems to be doing relatively well – maybe as a response to the generally deeper water around the site for the last few years? Five months in the year produced records counts. The first young of the year were seen on the 1st July, with the four broods in July and August comprising 9-6-3 and 1 young - the last young reported on the 6th August; this species has now bred in 14 of the 19 years since 2004. Breeding aside, maximum monthly counts were generally higher than the long-term median (2004-22) with February, August, September, October and November all producing records counts for the month; the highest count of the year was 80 birds on the 12th February. A summary of monthly maxima for the period 2004-22 is shown in the table below; and a summary of breeding since 2011 is shown below that.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	40	80	38	42	18	10	20	66	58	50	56	40
Median 2004-22	40	44	39	32	18	12	20	20	15	20	26	34
Maximum 2004-22	59	80	67	47	33	30	41	66	58	50	56	70

* Includes young birds.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of Broods	2	2	3	2	0	2	6	3	4	6	5	4

Pochard *Aythya ferina* (5, 19, 132) [≥12]

Reasonably visitor that is more common in the winter but often present through the summer months but with no proven breeding on-site prior to 2022. Most significant counts are made between December and February.

After a number of years when birds have been present through the summer month (May-July) this year saw breeding

confirmed for the first time on-site! A female was seen with 3 ducklings on the Scrape on the 15th May with subsequent reports of 2 young on the 20th May and the 17th June. Breeding aside, numbers were reasonable throughout the year with 100 days recorded, 397 bird days and a maximum count of 18 birds on the 14th January. A summary of data from the period 2004-22 is shown in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	162 (2008)	53	47	70	62	83	105	86	83	126	85	106
Bird-days	885 (2008)	171	126	216	204	388	524	533	345	520	262	397
Maximum	27 (2011)	12	18	11	15	20	20	16	18	16	15	18

* Maximum values are given for the period 2004–2011. – the year for that maximum being shown in brackets.

Pheasant *Phasianus colchicus* (5, 19, 50) [≥ 12]

Resident, previously supplemented by released birds from Tyttenhanger Farm; appears to be declining on site and all records are currently considered notable.

While there were 29 days-recorded there were no records in January, July, and December and the maximum count for the year was of just 3 birds on the 23rd April with just another 4 days producing more than a single bird. A summary of maximum counts, days-recorded and bird-days for the period 2010-2022 are summarised in the table below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Max. count	15	20	17	10	7	4	8	4	3	5	6	3	3
Days-rec.	46	59	37	62	37	32	46	25	26	48	79	42	29
Bird-days	139	104	75	112	63	43	76	40	30	68	117	54	34

Red-legged Partridge *Alectoris rufa* (5, 19, 200) [All]

Resident, previously supplemented by released birds from Tyttenhanger Farm; appears to be declining very rapidly on-site/locally so all records and counts are now considered significant.

Despite the low coverage it is clear that this species is struggling locally⁵ and with just 4 days recorded and a maximum count of two birds we do wonder when this species may disappear completely from the site. A summary of data from the period 2010 to 2022 is presented in the table below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	45	62	26	32	30	22	12	34	4	5	12	6	4
Max. count	70	71	44	6	10	9	3	2	1	6	2	4	2
Breeding	No	No	No	Yes	Yes	Yes	No	Yes	No	Yes	No	No	No

Great Crested Grebe *Podiceps cristatus* (5; 19, 46) [≥ 21]

Present throughout the year with small numbers of pairs breeding in most years. Significant counts are frequently in November, December and March – but can occur at any time of the year.

A conservative estimate of the number of breeding pairs for the year was of 5 broods – although it is possible that there may have been up to 7 broods with breeding reported from the Deep Lake, the Fishing Lakes and the Main Pit; altogether a much better year than the 2 broods in 2021. The maximum counts in most months (with the exception of April) were well below the long-term (2004-22) and the maximum count for the year was of just 16 birds on the 16th April. A summary of monthly maximum data from the period 2004-22 is shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	4	5	10	16	5	6	5	6	6	10	8	7
Median 2004-22	11	13	19	17	15	12	13	14	13	17	20	15
Maximum 2004-22	27	23	38	30	39	27	32	29	23	29	37	33

* Includes young birds.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	74	61	102	118	111	132	130	121	140	206	118	117
Corr'd Days	83	72	122	132	122	141	131	121	141	207	155	164
Bird-days	827	790	962	834	1184	1437	854	985	853	916	453	440
Ave. Count	11.18	12.95	9.43	7.07	10.67	10.89	6.57	8.35	6.41	4.51	3.94	4.44

⁵ Generally, a little more common at Coursers Road it was notable that the recording rate (number of days-recorded/days-visited expressed as a percentage) at this site dropped from 14.1% in 2020 and 2021 to 6.7% this year – the highest rate at Tyttenhanger in the same period was just 3.7% in 2020

As with other years the recent past (2013-2022) while the number of days recorded is reasonably stable, the abundance (as indicated by the average count in the table below) has declined quite substantially in the last couple of years – the result of disturbance or the consistently high-water levels? The following table shows days-recorded, corrected days-recorded, bird-days and average count (bird-days/days-recorded).

Little Grebe *Tachybaptus ruficollis* (5; 19, 14) [≥4]

Irregular breeding species present through much of the year - although often absent in the winter months. Counts of 4 or more birds are significant and when made have generally included young birds in the July-September window.

Another reasonable year for this species and despite the absence of breeding records it still managed a total of 51 days recorded and 78 bird-days – fairly similar to the figures of 54 days-recorded and 78 bird-days in 2021. The maximum count for the year was of 4 birds on the 28th January. The table below shows days-recorded, corrected days-recorded, bird-days and average count (bird-days/days-recorded) for the 2010-22 period.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	75	47	31	17	19	18	29	42	47	53	91	54	51
Corr'd Days	85	53	37	20	21	20	31	42	47	53	91	71	71
Bird-days	151	75	46	39	23	21	32	60	65	85	128	76	78
Ave. Count	2.01	1.60	1.48	2.29	1.21	1.17	1.10	1.43	1.38	1.60	1.41	1.46	1.56

Cormorant *Phalacrocorax carbo* (5; 19, 94) [≥29]

A common winter visitor with birds generally present throughout the year. Significant counts generally occur between November and January.

While monthly maxima were generally around the long-term (2004-2022) median values, overall numbers have continued to decline from the peak of 2016-17 and while the number of days-recorded are stable (maybe even increasing slightly in relative terms) this year failed to produce any significant counts (≥29 birds) and a maximum of just 26 on the 18th January. Maybe this general decline is a long-term impact of the bird-scarer still being employed on the Fishing Lakes or maybe the habitat just isn't as attractive as in the past? A summary of monthly maxima for the period 2004-22 is shown in the table below while the second table summarises data for days-recorded, corrected days-recorded, average count (bird-days/days-recorded) and the number of significant counts (≥29) for the period 2010-22.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	26	18	20	17	10	5	3	9	7	15	22	24
Median 2004-22	24	18	20	10	4	4	4	6	7	10	22	29
Maximum 2004-22	75	62	35	25	10	9	11	20	22	50	70	91

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	118	117	95	92	127	141	139	151	110	144	171	126	126
Corr'd Days	133	131	112	110	142	154	149	152	110	145	172	166	176
Counts ≥29	2	0	0	0	2	15	25	21	0	14	9	3	0
Ave. Count	5.9	6.0	6.9	5.8	5.3	12.6	14.9	12.2	7.7	11.3	11.2	8.1	8.0

Grey Heron *Ardea cinerea* (5, 19, 35) [≥12]

Present throughout the year with numbers generally on the increase as a result of the small breeding colony established in 2009.

Another good breeding year for this species with up to 11 occupied nests reported between 11th February and 14th April. Young birds were reported from the 28th March until 16th April with a maximum count of 6 young reported on several dates in April – this is however, no subsequent information to indicate fledging success. Monthly maxima were generally close to the long-term (2004-22) median values but March, April and November all produced record counts – albeit the March and November counts were shared with 2 and 5 other years respectively. The maximum count for the year was of 20 birds on the 28th March. A summary of monthly maxima data from the period 2004-22 is provided in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	10	13	20	18*	10	8	6	8	4	8	8	6
Median 2004-22**	8	9	10	8	10	9	6	8	8	6	6	7
Maximum 2004-22**	15	20	20	18*	16	16	20	35	23	18	8	12

* Includes young birds. **Median and maximum values of the monthly maxima for the period 2004-22. Record counts for a given month are highlighted.

Little Egret *Egretta garzetta* (5, 19; 24) [≥ 7]

Very infrequent visitor in the past with the first record in 1999; becoming more frequent as the breeding population continues to spread through the UK.

A substantial increase in days-recorded this year (121) over 2021 (62) – even more pronounced when corrected for the coverage (169 and 82 days respectively). This year's figures are much more like those of the recent past – which makes the very low numbers in 2021 even more difficult to explain! The highest count of the year was of 10 birds on the 14th July - the first double-figure count since July 2020 – and there were also a further three significant counts (≥ 7 birds) for the year. A summary of date for the period 2010-22 is provided in the table below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	21	30	51	84	74	140	195	169	204	198	156	62	121
Corr'd Days	24	34	60	100	83	153	209	171	204	200	156	82	169
Bird-days	34	49	58	105	88	262	616	789	530	356	343	88	256
Ave. Count	1.6	1.6	1.1	1.3	1.2	1.9	3.2	4.7	2.6	1.8	2.2	1.4	2.1

Great White Egret *Ardea alba* (5, 8, 2) [All]

Irregular visitor; first recorded in 2013. Becoming much more common in the UK and Hertfordshire and hopefully a future regular at Tyttenhanger. All records are still considered notable.

Now an almost annual occurrence at Tyttenhanger GPs⁶ this year saw a total of 31 days-recorded with all records being of single birds between the 27th September and 4th December. The pattern of occurrence this year was very much in keeping with other years i.e. with a marked preponderance of records in the 4th quarter (October to December) – see Figure 3. This pattern has been seen in 2013, 2016, 2019 and 2022 but interestingly it was only in the winter of 2016/17 that records continued into the second half of the winter (January to March of the following year)⁷.

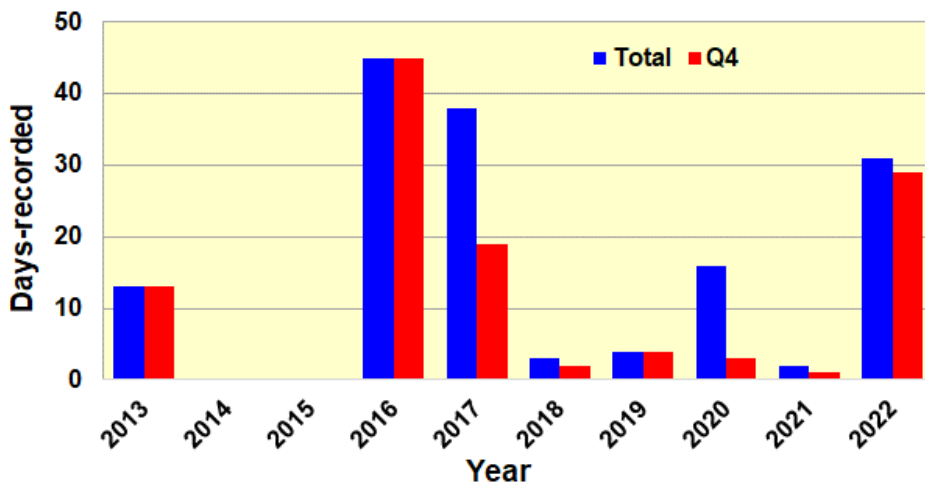


Figure 3. Days-recorded for Great White Egret *Ardea alba* at Tyttenhanger in the period 2013-2022. Total days are shown in blue while those days in the fourth quarter of the year (Q4) are shown in red.

Cattle Egret *Bubulcus ibis* (1, 1, 1) [All]

Rare visitor. First recorded in 2019, all counts are considered notable.

The second record for the site came on the 20th May this year when two birds were found at 8.15 am. They hung around for an hour and then flew off to the south.

Marsh Harrier *Circus aeruginosus* (4, 12, 1) [All]

Irregular visitor; first recorded in 1991. All records are notable.

Five records for the year all involving a juvenile - probably the same bird - reported on 16th, 20th, and 27th August then again on 30th September and 1st October.

Coursers Road. A juvenile was also seen at Coursers Road GPs on five dates between 4th August and 3rd September suggesting that the same bird may well have been in the area between at least the 4th August and 1st October. Interestingly the Herts Bird Club Sightings Archive show no similar records i.e. of a juvenile bird, in the south-east of the county in this period.

Red Kite *Milvus milvus* (5, 19, 12) [≥ 3]

Frequent visitor – becoming much more common as the English population continues to burgeon; recent on-site breeder.

After adjusting for the low coverage this year, days-recorded (107 day-recorded, corrected to 150) look much like most years in the recent past i.e., from 2013 onwards, while average count (bird days/days recorded) was slightly higher than

⁶ Has occurred in all years since first recorded in 2013 except for 2014 and 2015.

⁷ This also seems to be the case for the 2022/23 winter with no records in the early months of 2023 on the Herts Bird Club database. Maybe all of these birds have a better place to be for Christmas and New Year!

most years in the same period. The maximum count for the year was of 6 birds on 6th March while there were a further 16 (significant) counts of 3 or more birds - slightly lower than the 20 in 2018 and 28 in 2020. A summary of days-recorded, corrected days-recorded, bird-days and average count (bird-days/days-recorded) are shown in the table below. Figure 4 provides a summary of corrected days-recorded for the period 2004-22 for this and the other common birds-of-prey at Tyttenhanger GPs.

Addition 2002. The first record for Tyttenhanger was previously taken to be in 2004. However, reviewing the downloads from the Herts Bird Club Records archive revealed a record of a wing-tagged bird on the 22nd March 2002 – the first record for the site.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	78	95	138	143	121	114	120	109	137	180	98	107
Corr'd Days	87	112	165	159	132	122	121	122	139	180	129	150
Bird-days	97	149	180	194	165	147	190	164	264	320	195	188
Av. count	1.24	1.57	1.30	1.36	1.36	1.29	1.58	1.50	1.95	1.78	1.99	1.76

Buzzard *Buteo buteo* (5, 19, 10) [≥ 5]

Local resident that has become increasingly more common in Hertfordshire since 2004 and consequently more frequently observed at Tyttenhanger. Recently confirmed to have bred on-site.

Days-recorded and corrected days-recorded showed an increase over 2021 although bird-days and average count showed a decrease. The latter decreases were undoubtedly due to just 3 significant counts (≥ 5 birds) being made (with the maximum count of 5 birds made on three dates in April) and also a relatively high proportion of daily maxima involving just single birds i.e., 58%⁸. A summary of days-recorded, corrected days-recorded, bird-days and average count (bird-days/days-recorded) are shown in the table below. Figure 4 provides a summary of corrected days-recorded for the period 2004-22.



Photo courtesy of Simon West.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	74	67	82	87	113	97	114	98	117	167	81	97
Corr'd Days	83	79	98	98	124	104	115	98	118	168	107	136
Bird-days	101	170	178	216	223	226	260	198	251	313	178	160
Av. count	1.4	2.5	2.2	2.5	2.0	2.3	2.3	2.0	2.1	1.9	2.2	1.6

Sparrowhawk *Accipiter nisus* (5, 19, 4) [≥ 2]

Present throughout the year. Undoubtedly breeds locally but usually not confirmed. Over 86% of records involve single birds; counts of more than one bird and breeding records are considered notable.

A slightly better year than last year with 29 days recorded (corrected to 41 for coverage) compared with 26 in 2021 (corrected to 34) with two days on which more than one bird was recorded i.e., 2 birds on the 25th March and 23rd April. A reporting frequency of 20.9% (recorded on 15 dates from a total of 72 days-visited by one regular observer) – up from 14.9% in 2021 - was consistent with the slight increase in days recorded (see table below). Typically, there were no breeding records this year. The following table shows the days-recorded, corrected number of days-recorded, bird-days and the percentage recording frequency (% R.F.) for the period 2011-22. Figure 4 provides a summary corrected days-recorded for the period 2004-22 for this and the common birds-of-prey at Tyttenhanger GPs.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	40	30	23	44	42	56	51	44	62	68	26	29
Corr'd Days	45	35	27	49	46	60	51	44	63	68	34	41
Bird-days	45	36	27	53	48	68	58	45	77	71	27	31
% R.F.	30.5	33.3	16.4	29.3	20.9	30.1	22.1	15.7	20.0	20.6	14.9	20.8

⁸ Most years in the period 2011-22 have produced values for the proportion of single-bird daily-maxima between 33% and 46% - 2022 being the obvious exception at 58%, the latter being the highest value since 2009.

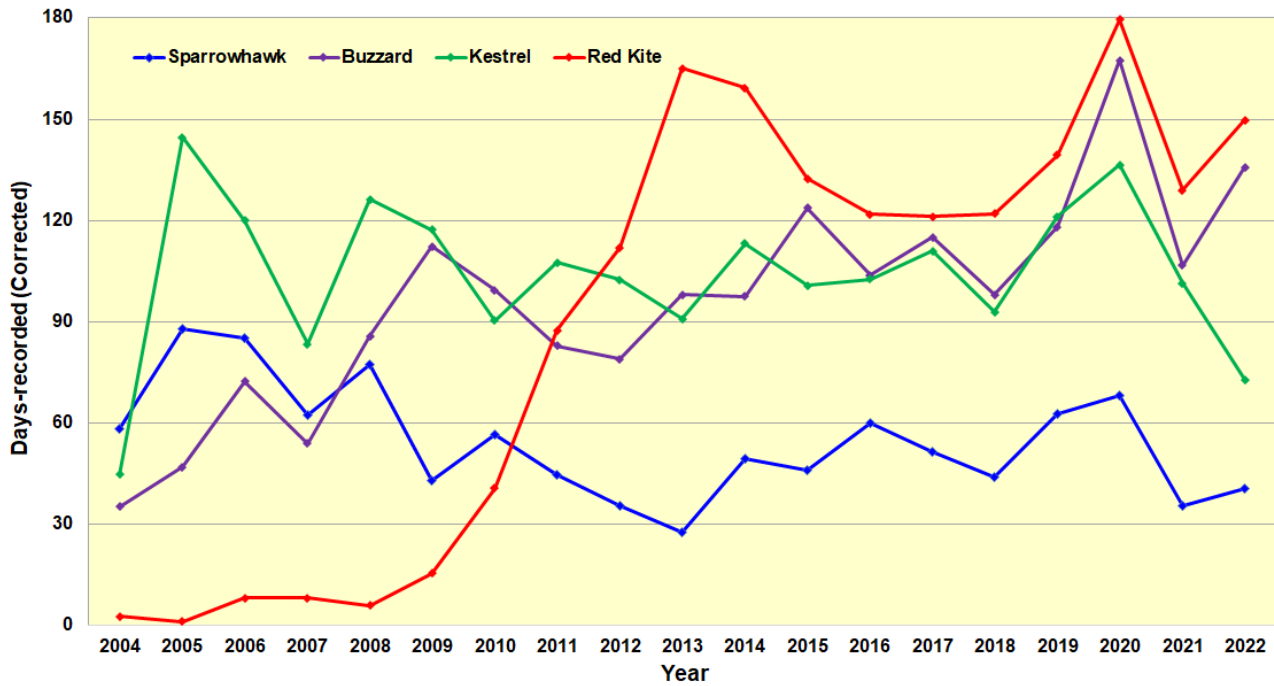


Figure 4. Summary of Days-recorded (corrected) for the more common birds of prey at Tythenhanger during the period 2004-22. Raw data for days-recorded were corrected for the coverage in each of the years relative to the maximum coverage of 324 days in 2018.

Peregrine *Falco peregrinus* (5, 19, 2) [All]

Regular visitor. All records are still considered notable - especially those of multiple birds.

There were 23 days-recorded this year with all records being of single birds and although most records were of un-aged/un-sexed birds, there were 2 records of an adult bird and 2 records of a juvenile bird – indicating at least 2 birds used the site this year. Although days recorded failed to reach the peak of 2019, after correction for coverage this year ranked as the fourth best in the period 2004-22! A summary of corrected days-recorded is shown in Figure 5.

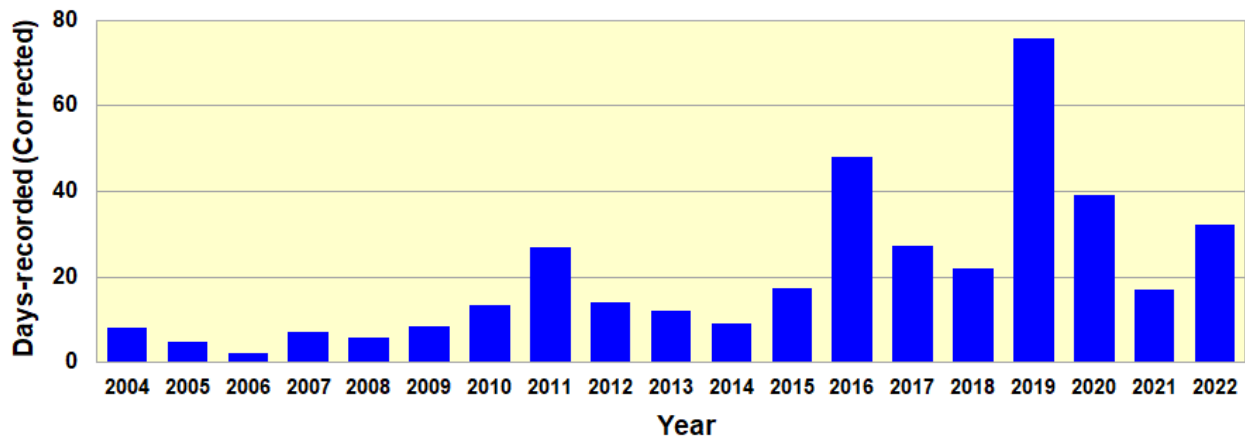


Figure 5. Days-recorded (corrected) for Peregrine *Falco peregrinus* in the period 2004-22. Corrections were made for the days of coverage relative to the peak in 2018.

Kestrel *Falco tinnunculus* (5, 19, 7) [≥2]

Birds of both sexes are generally present throughout the year with on-site/locally in most years. Over 75% of records involve single birds and records of more than one bird and any breeding records are notable.

Days-recorded and average count (bird-days/days recorded) were both at the lowest they have been since 2004 and even after correction for the low coverage, corrected days-recorded were still the lowest since 2004. This year failed to produce any breeding records and the maximum count for the year was of just 2 birds on the 26th February, 12th March and 23rd April. All of the above, along with the data summarised in Figure X and the low recording-frequency of 33.3% (see table below) suggest that the local population is in rapid decline. However, all is not doom-and-gloom as this species has previously shown rapid short-term from which it has bounced back e.g., 2005-07, bouncing back in 2008. The following table shows days-recorded, corrected number of days-recorded, average count (bird-days/actual days-recorded) and the percentage recording frequency for the period 2011-22. Figure 4 provides a summary of the recording

frequency and a comparative plot of the corrected days-recorded for the period 2004-22 for this and the common birds-of-prey at Tyttenhanger GPs.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	96	87	76	101	92	96	110	93	120	136	77	52
Corr'd Days	108	103	91	113	101	103	111	93	121	136	101	73
Ave. count	1.27	1.46	1.22	1.42	1.20	1.29	1.28	1.22	1.53	1.32	1.26	1.06
% R.F.	63.4	85.5	57.4	69.3	60.4	60.3	55.8	51.4	72.0	38.1	53.2	33.3

Hobby *Falco subbuteo* (5, 19, 5) [≥3]

Passage migrant and summer visitor; median spring arrival date (2004-22) 29th April; median autumn departure date (2004-22) 27th September. Over 73% of all counts are of single birds; counts of 3 or more birds are statistically significant.

The first bird of the year appeared on the 23rd April, a little before the long-term (2004-22) median date of the 19th April and birds were then seen relatively frequently through until September producing a total of 42 days recorded for a total of 54 bird-days; the maximum count for the year was of just three birds on the 30th April and 7th September. The last bird of the year was seen on the 10th September considerably earlier than the long-term (2004-22) median date of the 27th September. Unlike several years in the recent past this year failed to produce any August/September records of juvenile birds and/or possible family parties – possibly indicating that there were no birds breeding locally this year? The following table shows days-recorded, corrected number of days-recorded, average count (bird-days/ days-recorded) and the maximum count for the year for the period 2011-22.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	24	26	28	38	26	35	30	54	60	73	40	42
Corr'd Days	27	31	33	43	28	37	30	54	61	73	53	59
Ave. count	1.33	1.15	1.25	1.13	1.23	1.06	1.23	1.80	1.42	1.45	1.88	1.29
Maximum	2	2	3	2	5	2	3	5	5	5	3	3

Water Rail *Rallus aquaticus* (5, 19, 7) [≥3]

Regular winter visitor in the recent past; median spring departure date (2004-22) 22nd March; median autumn arrival date (2004-22) 30th October. All records between 21st April and 1st September are particularly noteworthy and are considered summer-records.

This year produced a total of 32 days-recorded for 51 bird-days and a maximum count of 4 birds on the 8th and 11th December. Days-recorded were distributed fairly evenly between the first (13) and second (19) winter periods with a single record in the April-September window i.e., a bird heard squealing in the Main Reed Bed on the 26th July. Not counting the above record, the last record in the first winter period was on the 19th April and the first in the second winter period on the 10th September. “Appendix 1B” (page 53) provides a summary of spring departure and autumn arrival dates). This is the fourth year in a row that summer-records have been received and indicates that breeding may occur on-site in the near future!

Moorhen *Gallinula chloropus* (5; 19, 69) [≥20]

Common resident with a few pairs breeding in most years.

A nest with 6 eggs were noted on 7th May but then recently fledged young were not reported until the 6th August when the only broods of the season (of 1 and 2 young) were noted. The best count of the year was of 24 birds on the 18th January with two further significant counts (≥20 birds) recorded. Monthly maxima were generally around the long-term (2004-22) median values although it is noticeable that numbers through the May-August window are reflective of the low numbers of breeding pairs. The table below provides summary of monthly maxima data for 2004-22.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	24	19	18	16	4	5	2	8	12	20	20	8
Median 2004-22	20	14	15	10	8	10	12	12	14	20	20	16
Maximum 2004-22	40	39	40	29	31	25	60	40	50	47	69	60

Coot *Fulica atra* (5, 19, 214) [≥100]

Has seen large fluctuations in status over the years; currently a common breeding resident and winter visitor.

Young birds were reported from the 22nd April through to 6th August with at least 3 and possible 4 broods that hatched; broods of 2 and 5 were reported. Interestingly there were 3 nests reported on the Fishing Lakes on the 2nd April, but the only subsequent brood reported not from the Main Pit was from the Deep Lake. Breeding aside, monthly maxima through the year were generally above the long-term (2004-22) median values, with the highest count of the year being of 200 birds on the 14th October - a record count for the month. The table below provides summary of monthly maxima data for

2004-22 along with the median and maximum count in that period for each month; record counts for a given month are highlighted.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	120	106	78	65	45	80	150	102	74	200	70	40
Median 2004-22	88	88	62	50	45	58	70	80	74	60	70	84
Maximum 2004-22	148	148	125	81	155	171	207	150	214	200	178	196

Oystercatcher *Haematopus ostralegus* (5, 18, 8) [≥4]

Summer visitor that has bred in the past. Median arrival date (2004-22) 3rd March; median departure date (2004-22) 22nd July; records outside the February-August window are especially notable.

The first bird of the year arrived on the 13th February and was soon joined by a second bird on the 18th. A third bird appeared on the 27th February with 3 birds being reported off and on through until the 19th March. Courtship and display was noted on the 18th March and then nest-building was reported on the 8th April. The next significant record is from the 15th May when an adult was seen with 3 chicks on the Fishing Lakes. The adults and the three young⁹ were then reported through until the 6th July with the young being noted as “well grown” on the 1st July. The 6th July was the last date that the birds (4 birds – “Family party”) were reported on-site and were recorded to be moving between Willows Farm Lake and the Fishing Lakes – indicating that the young birds had fledged! The table below shows a summary of data from 2010-22 with days-recorded, the total number of bird-days and the breeding summary for the year i.e., the number of pairs that built a nest, and the number of young that were seen to hatch (in brackets).

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	90	60	57	70	60	80	82	105	76	122	81	48	45
Corr'd Days	102	67	67	84	70	88	88	106	76	123	81	63	63
Bird-days	228	124	109	116	100	166	202	230	90	179	152	87	106
Breeding*	1 (2)	0	0	0	1 (0)	1 (3)	1(3)	1(3)	0	0	1 (2)	1(2)	1(3)

*Breeding shows the number of pairs established and the number of young that hatched (in brackets).

Coursers Road. This year saw birds reported on 24 days between the 2nd March and 1st July, with two birds present on 8 of these days, 3 birds on the 14th April and 5 birds on the 1st July – all of the latter referred to as “adults” While difficult to be sure it seems that there may well have been up to 2 adults present at Coursers Road during the time that the pair were breeding across the road suggesting there is a cohort of non-breeding birds that are also hanging around the general area.

Little Ringed Plover *Charadrius dubius* (5, 18, 18) [≥7]

Rapidly declining passage migrant and former breeding species. Median arrival date (2004-20) 30th March; median departure date (2004-20) 9th August. All records are now considered notable.

After a blank year in 2021 this year was slightly better with a record of a bird flying over the Main Pit on the 10th May.

Coursers Road. There was a slightly better yield from over the road with 12 days-recorded for a total of 25 bird days and a maximum count of 4 birds on the 8th April and 5th June.

Golden Plover *Pluvialis apricaria* (5, 19, 2160) [≥210]

Now an erratic winter visitor to the area - median spring departure date (2004-22) 30th March; median autumn arrival date (2004-22) 10th October. All records are currently considered notable.

There was only one record this year that being of 12 birds flying north-east over the Main Pit on the 2nd March. It is clear from the data below that this species has been in general decline at Tyttenhanger GPs since the early 2000's – a trend that seems to be reflected across the previous stronghold of the broader Shenley-London Colney-Tyttenhanger-Colney Heath area¹⁰. A summary of early and late dates and the respective medians for the period 2004-22 can be found in “Appendix 1B” (page 53).

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	65 (2006)	7	7	11	2	2	6	5	5	3	3	1
Corr'd Days	76 (2006)	8	8	12	2	2	6	5	5	3	4	1
Maximum	2000 (2005)	36	120	143	15	19	150	22	100	300	150	12

*The maximum value for the period 2004-11 is shown along with the relevant year (in brackets)

⁹ There was a record of the three young in a total of 6 birds on the 15th and 20th May and the 10th June. From at least one of the records it appears that there were up to 2 additional adults present (and presumably non-breeding) at Coursers Road during this period and so it is likely that there were more than two adults present in the area.

¹⁰ This observation is gleaned primarily from the Hertfordshire Bird Reports and the Herts Bird Club records archive. Interestingly the BTO winter atlases of 1981-84 and 2007-11 indicate little change in distribution in the south-east between the two atlases. The next atlas (which should also include data on relative abundance) may be better placed to see if our impressions are correct.

Lapwing *Vanellus vanellus* (5, 19, 2000) [≥300]

Generally present through much of the year with large winter flocks in many years. Previously nested on site in most years - but has not bred since 2010. Numbers and days-recorded have declined dramatically in the last few years.

First impressions are that 19 days-recorded is a slight improvement on 2021, however it is soon apparent that while days-recorded may have been slightly better, that all other parameters are going in the wrong direction:

- A maximum count of 32 birds (4th December) compared to 100 in 2021,
- Just 5 days producing double-figure counts compared to 9 in 2021,
- Three months failing to produce a single record (June, July and September) compared to 2 in 2021,
- Record low counts in January (17 on the 30th January) , September (0), October (3 on the 7th October) and November (25 on 28th November) and record-equalling low counts in March (1), April, (1), May(1), June (0) and July (0).

The general decline apparent through much of southern England for this species may well be exacerbated by the changes in land-use at Tyttenhanger GPs in the last several years along with the high-water levels. However, it is unlikely that the situation will improve and we may soon be reporting all records for the year!

Snipe *Gallinago gallinago* (5, 19, 68) [≥15]

Winter visitor and common passage migrant; median autumn arrival date (2004-22) 8th August and median spring departure date (2004-22) 22nd April. Records between the 8th May and 24th July are especially notable.

It is highly likely that with water levels so high and visibility so restricted that this species is more abundant than the records indicate – some evidence for the latter is provided by the record for the maximum count for the year i.e., 16 birds on the 21st January, that was reported as “flushed by Sparrowhawk”. Notwithstanding the above caveats this year still managed to produce more days recorded (27) than 2021 (14) and more bird-days (58 compared to 34). The last bird of the spring was seen on the 29th April and the first bird of the autumn on the 3rd September. The following table shows days-recorded, corrected days-recorded, bird-days and the number of significant counts (≥15 birds) for the period 2010-22.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	57	49	49	43	63	54	52	44	139	146	50	14	27
Corr'd Days	64	55	58	51	71	59	56	44	139	147	50	17	38
Bird-days	155	85	111	118	308	171	145	154	891	1215	217	34	58
Counts ≥15	0	0	0	0	4	2	1	2	14	24	2	1	1

Woodcock *Scolopax rusticola* (5, 16, 5) [All]

Regular winter visitor between November and April – records outside of this period are especially notable.

A good year for this species with three records spread across the site all of single birds; one on the 29th January (Garden Wood), one on the 10th February (Colney Heath Common) and then one on the 18th November flying over the pumpkin field opposite Willow's Farm.

Bar-tailed Godwit *Limosa lapponica* (2, 8, 4)

Scarce migrant.

Last reported in 2018 this year saw a single bird fly over the Main Pit at 05.20 am on the 1st May. This is the 14th record for the site since the first record in 1987.

Curlew *Numenius arquata* (3, 16, 19) [All]

Infrequent passage migrant

This year saw a single record of a bird flying around the site at 04.15 am on the 14th April. This is the 24th record period 2004-22 and the 52nd since first recorded in 1986 – 18 records of the 51 have been in April.

Whimbrel *Numenius phaeopus* (2, 11, 31)

Irregular passage migrant

There were two days-recorded for the year with both records in the spring. The first record was of a single bird flying over north at 07.32 am on 22nd April then two other birds were seen flying over north at 10.20 am on the same date. The next record was of five birds flying east in a tight flock on the 23rd April. This year's records are the 41st and 42nd days-recorded for the site – with the latter being only the 10th of them in the autumn.

Green Sandpiper *Tringa ochropus* (5, 19, 14) [≥5]

Winter visitor and passage migrant; median spring departure date (2004-22) 20th April; median autumn arrival date (2004-22) 19th June. Records between the 30th April and 14th June are particularly notable.

With no records between the 30th August 2021 and the 22nd June 2022 it was a little surprising that the second winter

period of the current year produced a further 13 days recorded between the 14th July and 13th November¹¹. Once a winter regular i.e. in the 4th and 1st quarters of consecutive years (October to March inclusive), the following table shows the decline of this species at this time of year. The autumn passage this year (July-September) produced 6 days-recorded and the first half of the 2022/23 winter (October-December) 7 days-recorded but early indications are that this species was absent in the early part of 2023. The following table shows a summary of days recorded for the winters (October-March) from 2004/05 through until 2021/22.

	Pre 12/13**	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22
Days-rec'd*	25 (08/09)	22	27	2	10	81	81	54	20	2	0

* Days-recorded are for the winter period only i.e. October to December and January to March of the following year. **The minimum number of days recorded in the winter periods between 2003/04 and 2011/12 is shown along with the winter period in which that occurred. The maximum in this period was the winter of 2005/06 which produced 102 days-recorded.

Redshank *Tringa totanus* (5, 19, 14) [≥ 7]

Summer visitor last breeding in 2010. For summering birds, the median arrival date (2004-22) is the 8th March and the median departure date (2004-22) is the 24th July – records outside of 23rd February to 16th August are particularly notable.

This species clings to the annual list again with just a single record for the year - a bird heard (but not seen) on the Main Pit on the 2nd March. The following provides a summary of days-recorded and bird-days from the period 2011-22.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	91	69	58	30	27	34	29	35	23	16	3	1	1
Bird-days	331	229	177	49	52	62	45	38	36	18	3	1	1

Coursers Road: the general decline of this species in the Upper Colne Valley is shown by the small numbers of records from this apparently more attractive site i.e., just three records for the year of single birds on the 16th and 22nd July and 2 birds on the 19th October.

Greenshank *Tringa nebularia* (5, 19, 18) [≥ 3]

Spring and autumn migrant in small numbers. median spring arrival date (2007-21) 20th April; median autumn departure date (2007-21) 28th August¹². Records outside of the period 12th April to 26th September are particularly notable.

Just one record of a single bird over the back scrape on the 14th September. A summary of days-recorded and bird-days from the period 2010-22 are shown in the table below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	7	9	2	3	4	3	13	21	26	14	2	1	1
Bird-days	11	20	2	8	5	3	14	31	47	18	2	1	1

Common Sandpiper *Tringa hypoleucos* (5, 19, 18) [≥ 4]

Regular passage migrant, more frequent in autumn. Median arrival date (2004-22) 16th April; median departure date (2004-22) 28th September.

This year produced just a single spring record this year of a bird on the 29th April. It was a long wait until the 8th July for the first of 8 days-recorded in the autumn with a single bird followed by a further 6 days with single birds before the last bird of the year was seen on the relatively late date of the 16th October. The total of 9 days-recorded - all single birds – even when corrected to take account of the coverage (13 days – one day more than the 12 days of 2021), is well below the next higher value of 32 days (2010). In addition, this is the first year in the period 2004-22 that failed to produce a day with more than a single bird! A summary of data for days-recorded, corrected days-recorded (summer correction – S), bird-days and maximum counts for the period 2004-22 is shown in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	43 (2007)	48	54	41	71	76	61	71	89	30	9	9
Corr'd days (S)	50 (2007)	57	65	46	33	82	62	71	89	30	12	13
Bird-days	62(2007)	86	74	56	43	125	102	121	149	35	12	9
Maximum	3 (2009)	5	6	4	3	5	5	5	5	2	2	1

* The lowest values in the period 2004-11 are shown for each of the parameters along with the relevant year (in brackets).

Addendum 2021. The correction applied for days-recorded in the 2021 report was based on the annual coverage

¹¹ At the time of writing it doesn't appear this slight upturn in fortunes has carried through into the first winter period of 2023 i.e. the Herts Bird Club Sighting Archive has no records for the latter period!

¹² Records from before 2007 have not been used to calculate early/late dates as these may have been biased by the long-term winter visitor that frequented the site in the period from late 2001 until early 2006.

figures. The correction for the current report (shown as “Corr’d days (S)” in the above table) were based on the summer cover i.e., between April and September inclusive. The following table shows the results of applying the two different corrections for this species in the period 2011-22.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Corr'd - Annual	45	57	65	46	33	82	62	71	89	30	12	13
Corr'd - Summer	45	59	65	45	34	85	63	71	90	32	12	13

Black-headed Gull *Chroicocephalus ridibundus* (5, 19, 1900) [≥400]

Common non-breeding species present virtually all year around with numbers generally lowest between April and June and peak counts usually in the early winter.

Numbers were generally lower this year than over the last several years with most months recording maxima below the long-term median (2004-22) - with the exception of January and March. The highest count of the year was of 700 birds on the 18th January (the lowest since 500 in 2016) with two other significant counts (≥400 birds) on the 6th March and 4th December. A summary of monthly maxima data from the period 2004-22 shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	700	250	450	6	6	4	40	200	150	300	220	400
Median 2004-22**	314	300	258	18	8	17	256	375	460	340	350	400
Maximum 2004-22**	800	1000	800	30	26	109	600	1000	1500	800	1200	1200

** Median and Maximum values from the monthly maxima for the period 2004-22

Common Gull *Larus canus* (5, 17, 256) [≥75]

Regular winter visitor; usually absent during the summer months between mid-April and early July with a median spring departure date 8th April (2004-22) and median autumn return date of 10th July (2004-22).

Like 2021, this year failed to produce any records between April and July but unlike 2021 also managed to go record-less in August – the first time this has occurred in the period 2004-22! Subsequently there was just a single individual recorded in September while the final quarter of the year (October-December) could only manage a maximum of 8 birds. The first quarter of the year was slightly better although all three months (January-March) produced monthly maxima well below the long-term (2004-22) median values. So, coupled with the generally low counts a maximum count for the year of just 34 birds (the lowest in the period 2004-2022) and a gap between the last spring record (25th March) and first autumn record (2nd September) of 161 days (the longest in the period 2004-22), makes this the poorest year for this species in the period 2004-22. A summary of monthly maxima data from the period 2004-22 is shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	30	34	10	0	0	0	0	0	1	8	6	6
Median 2004-22**	60	62	77	3	0	0	1	3	3	22	50	60
Maximum 2004-22**	200	256	218	142	9	6	8	28	16	52	144	200

** Median and Maximum values from the monthly maxima for the period 2004-22.

Yellow-legged Gull *Larus michahellis* (5, 16, 3) [All]

Previously irregular visitor, becoming more regular.

There were two records this year both involving adult birds - one on 21st January and one on 24th April. Interestingly, while Coursers Road produced a total of 26 days-recorded this year, the 6 records involving an adult bird were in the second half of the year (25th September to 27th December).

Coursers Road. As mentioned above this site produced a total of 26 days-recorded this year, with records from 5 of these days involving 2 birds. The records ranged from the 11th March through until the 27th December and involved at least 5 different birds.

Herring Gull *Larus argentatus* (5, 18; 200) [≥24]

Present through much of the year although local breeding has resulted in increased records in the summer months in the recent past.

While 2020 was probably the peak year for this species at Tyttenhanger GPs, the last two years have also been outstanding in the context of the period 2004-22. Even without correction this year still produced 116 days-recorded, a maximum count of 75 birds on the 9th October (also a record count for the month) and a total of 15 significant counts (≥24 birds) – mostly in the first and final quarters of the year. The low numbers towards the end of 2021 appear to have been a “blip-on-the-radar” as counts at the beginning of this year were reasonably good. The breeding colony on the roof of the distribution centre in London Colney is still active – although the number of nests counted this year was down to 5 this year compared to 11 in 2021. The following tables show days-recorded, corrected days-recorded, number of significant counts (≥24 birds) and the average count (bird-days/days-recorded) for the period 2010-22 (upper table) and,

monthly maxima for 2021 and 2022 along with the maximum count for each month in the period 2004-22.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	21	52	43	83	91	128	123	147	117	140	192	111	116
Corr'd days	21	52	43	83	91	128	123	147	117	141	192	146	162
≥24 birds	0	0	0	1	0	1	2	7	4	8	16	17	15
Ave. count	1.6	2.2	2.9	3.2	2.7	4.5	5.3	7.9	6.4	7.5	8.9	12.9	9.3

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2022	32	16	50	28	20	6	9	40	20	75	42	25
Monthly Max 2021	25	150	82	60	14	30	35	50	45	4	10	8
Maximum 2004-22*	120	150	82	60	25	40	35	50	45	75	68	200

* Maximum values from the monthly maxima for the period 2004-22. Record counts for a given month are highlighted.

Caspian Gull *Larus cacchinans* (4, 5, 2) [All]

Previously rare visitor – status changed dramatically in 2016/17 and currently considered an irregular visitor.

The first record since 2018 was a first winter bird standing on the ice on the Main Pit on 13th December; this was probably the 1st winter bird that had been reported at Coursers Road on 5 dates between the 22nd November and 27th December.

Coursers Road. There were nine records from this site, all in the second half of the year between the 31st August and the 27th December; up to 4 birds may have been involved in these records including the above first winter bird.

Lesser Black-backed Gull *Larus fuscus* (5, 19; 142) [≥40]

Present throughout the year; with a recently established breeding population nearby in London Colney, records in the summer months have increased dramatically.

Overall numbers were slightly down this year on 2021 but still consistent with the general pattern this species has shown in the last 10 years. The best count of the year was of 65 birds on the 6th August with a further 5 significant counts (≥40 birds) made between April and October. As with the above species, there is still an active breeding population next to the London Colney by-pass with 20 nests counted this year. The following table show monthly maxima for 2022 along with the median and maximum counts for each month in the period 2014-22 (upper table). The lower table shows days-recorded, corrected days-recorded, number of significant counts (≥40 birds) and the average count (bird-days/days-recorded) for the period 2010-22 (lower table).

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2022	28	23	30	60	30	16	15	65	35	44	25	15
Median 2014-2022*	16	12	16	15	8	10	9	13	10	14	13	19
Maximum 2014-2022*	30	42	142	80	100	70	108	129	71	97	50	50

* Median and maximum values from the monthly maxima for the period 2014-22.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	117	119	91	115	133	145	145	156	137	150	202	125	119
Corr'd days	132	133	107	137	149	159	155	157	137	151	203	165	167
≥40 birds	0	3	3	3	5	19	18	12	9	23	10	13	6
Ave. count	4.9	7.7	8.3	10.0	13.4	20.6	16.9	17.4	18.4	19.4	9.7	14.5	11.2

Correction 2021 - The above table in the 2021 Report had the significant count shown as ≥21 birds, this should have read ≥40 birds – the numbers in the table do refer to the latter value rather than the value shown.

Great Black-backed Gull *Larus marinus* (5, 19, 13) [≥2]

Previously an infrequent visitor most often encountered in the cooler months –has recently become a much more frequent visitor albeit in small numbers; 75% of all records relate to single birds.

Recorded on just 7 days this year with the only record of more than one bird being a count of 2 birds on the 18th October. A summary of days-recorded and bird-days for the period 2004-22 is provided in the table below.

	2004-10*	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	25 (4.0)	5	3	3	6	2	6	53	62	43	11	9	7
Bird-days	32 (5.0)	7	3	3	7	5	14	65	91	53	12	13	8

* The total number of days-recorded and bird-days in the period 2004-10 are shown along with the annual-average for the same period - in brackets.

Common Tern *Sterna hirundo* (5, 19, 30) [≥ 13]

Summer visitor that regularly attempted to breed in the past. Median arrival date (2004-22) 13th April; median departure date (2004-22) 3rd September.

The first bird of the year arrived on the 19th April - slightly later than median date (2004-22) of the 13th April while the last bird of the year was seen on the 21st August slightly earlier than the median date (2004-22) of the 3rd September. Between these dates numbers were slightly better than 2021 with a total of 38 days recorded (45.0% of days covered – 33 days-recorded i.e. 33.7% of days covered in 2021), a maximum count of 6 birds (29th July) compared to just 3 in 2021 and an average count (bird-days/days-recorded) of 2.4 birds compared to 1.4 in 2021. Nevertheless, while these numbers are an improvement over 2021, they are nothing like those in the period 2004-16 and are probably indicative of a general decline in the attractiveness of the site for this species in the recent past. The table below shows days-recorded, corrected days-recorded, and maximum count for the period 2010-22.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	69	77	50	59	68	82	75	81	84	69	86	33	38
Days corr'd	77	86	59	71	76	90	80	82	84	70	86	43	53
Max.count	16	18	20	22	20	23	22	10	9	8	11	3	6

Sandwich Tern *Sterna sandvicensis* (2, 7; 4)

Infrequent visitor.

The first record since 2018 saw 2 birds fly through on the 23rd April. This is the 11th record for the site since the first in 1996; it is the fourth record for April and only the third day-recorded with multiple birds – the others being 4 birds on the 22nd and 23rd August 2000.

Woodpigeon *Columba palumbus* (5, 19, 4000) [≥ 250]

Common resident. Present throughout the year often in large flocks and with a notable late autumn passage in some years.

Although slightly better than the last 2 years this was still an ordinary year for this species with a maximum count of just 270 birds on the 19th October – the only significant count (\geq of the year and no evidence of breeding). A summary of maximum counts for the period 2004-22 is provided in the table below along with those for the other common pigeons/doves.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Feral Pigeon	1250 (2006)	150	50	103	185	120	250	120	60	45	63	58
Stock Dove	200 (2005)	5	20	25	20	148	20	15	51	37	17	70
Woodpigeon	3000 (2005)	300	140	500	1000	1500	800	1000	1000	154	150	270
Collared Dove	57 (2006)	2	11	2	4	3	11	6	22	15	4	18

* The highest counts in the period 2004-11 are provided along with the year in which that count was made (in brackets)

Stock Dove *Columba oenas* (5, 19, 200) [≥ 15]

Common resident present throughout the year but subject to significant variations between years.

A high-count for the year of 70 birds on the 12th February which proved to be the highest since 2017 with the year also producing a further 6 significant counts (≥ 15 birds) – the best since 2006.¹³ There were 87 days-recorded this year (corrected for coverage to 122 days) and although there were no breeding records this year it was one of the better years in the period 2004-22. The following table provides a summary of days-recorded and corrected days-recorded for the period 2004-22; maximum counts for the same period are shown in the table above (see above under Woodpigeon).

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	126 (2006)	30	61	68	71	84	98	69	103	155	66	87
Corr'd Days	171 (2006)	35	73	76	78	90	99	69	104	155	87	122

* The maximum days-recorded and corrected days-recorded in the period 2004-11 is provided along with the relevant year (in brackets).

Correction 2021 - The 2021 report erroneously included the data for Woodpigeon *Columba palumbus* in the above table rather than those for the current species. The above table has been corrected and now contains the data for this species.

Feral Pigeon *Columba livia* (5, 19, 1250) [≥ 80]

Common resident, particularly common around Willows Farm.

This was the 4th year in a row that failed to produce a 3-figure count – the maximum count being of just 58 birds on the

¹³ 2005 and 2006 produced 20 and 11 significant counts (≥ 15 birds) respectively – the only years in the period 2004-2022 to produce double-figures for significant counts.

5th March. Days-recorded (98 – corrected for coverage to 137) were relatively good and there was no indication that counts were made less often this year than in previous years indicating that this species just isn't as abundant on-site as it was in the past. The following table provides a summary of days-recorded and corrected days-recorded for the period 2004-22; maximum count data for the same period are provided above (see above under Woodpigeon).

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	119 (2008)	37	38	74	99	118	120	82	117	128	57	98
Corr'd Days	142 (2008)	44	45	83	108	126	121	82	118	128	75	137

* The maximum days-recorded and corrected days-recorded in the period 2004-11 is provided along with the relevant year (in brackets).

Collared Dove *Streptopelia decaocto* (5, 19, 150) [≥ 9]

Patchily distributed resident.

The see-sawing history of this species on-site continues as this year produced 66 days-recorded, corrected for coverage to 92 days - which is second only to the 106 days in 2006! The year also produced a total of 7 significant counts (≥ 15 birds) – which is the best since 2008 (10 significant counts). There is no evidence indicating counting/recording of this species was any better this year than in other years and so it may be that it just had a very good year on-site – despite the lack of any breeding records! The following table provides a summary of days-recorded and corrected days-recorded and significant counts (≥ 15 birds) for the period 2004-22; maximum count data for the same period are provided above (see above under Woodpigeon).

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	93 (2006)	33	31	13	17	15	36	31	71	88	24	66
Corr'd Days	108 (2006)	39	37	15	19	16	36	31	72	88	32	92
≥ 15 birds	11 (2008)	0	1	0	0	0	3	0	2	3	0	7

* The maximum days-recorded and corrected days-recorded in the period 2004-11 is provided along with the relevant year (in brackets).

Addition 1983 - A recently discovered record sets a new record count for the site (previously 57 on the 23rd August 2006) - "There was also an unusual mid-summer gathering of ca 150 at Tyttenhanger GPs in June and July". Herts. Nat. Hist. Soc. **29**, 152.

Cuckoo *Cuculus canorus* (5, 18, 5) [≥ 2]

Summer visitor in small numbers. Median spring arrival date (2004-22) 19th April; median autumn departure date (2004-22) 9th August. The majority of days-recorded (86.3%) involve just a single bird.

The first bird of the year arrived on the 18th April – just before the 2004-22 median date of 19th April. Subsequent numbers were very similar to 2021 with 21 days-recorded and just a single day with more than 2 birds present (10th June) - 2021 produced 18 days-recorded and also just a single day with more than one bird present. Also, like 2021, there were no records after the 17th June – which was the date that last-birds were recorded in both years! The following table shows a summary of days-recorded and corrected days-recorded for the period 2004-2022; the correction used for these data were for summer coverage only i.e. May-September.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	24 (2006)	17	10	21	17	8	4	4	17	25	18	21
Corr'd Days	28 (2006)	21	12	23	19	9	4	4	17	26	23	30

* The maximum days-recorded and corrected days-recorded in the period 2004-11 are provided along with the relevant year (in brackets).

Ring-necked Parakeet *Psittacula krameri* (5, 15, 792) [≥ 72]

Previously an irregular visitor now becoming a very frequent occurrence across the site.

As mentioned in previous reports, the status of this species has changed so rapidly in the recent past that it is difficult to actually provide meaningful statistics on a year-to-year basis! Nevertheless, while 2021 showed an obvious decline from the massive numbers in 2020, this year showed a bounce-back to figures more in line with the build-up to 2020¹⁴. The maximum count for the year was of 428 birds on the 22nd October with a further 8 significant counts (≥ 72 birds) made between the 1st October (82 birds) and 29th December (165 birds) – ranging between the numbers shown for the latter two dates. The following table provides a summary of data for days-recorded, bird-days, maximum count and number of significant counts (≥ 72 birds) for the period 2004-22.

¹⁴ Numbers in the latter part of 2020 were fuelled by a large roost to the north of Tyttenhanger GPS that saw large numbers existing the roost in the mornings in a southerly direction i.e. bringing them over the site.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	5 (2008)	3	1	5	4	10	62	105	156	208	114	108
Bird-days	16 (2011)	5	2	9	6	19	220	428	1250	7388	895	2074
Maximum	1 (2011)	2	2	4	2	4	25	22	63	792	50	428
≥72 birds	0	0	0	0	0	0	0	0	0	30	0	9

* Highest number of days-recorded and bird-days in the period 2004-11 are shown along with the year in which the count/total was obtained (shown in brackets).

Tawny Owl *Strix aluco* (5, 19, 5) [All]

Resident breeding species; undoubtedly under-recorded but present in most woodland areas on-site; most records (>87%) are of single birds.

This year produced three records as follows: a single bird calling at dusk in Garden Wood on the 29th January and by the Waterworks on the 2nd March, a bird was also seen roosting by the Model Railway at midday on the 13th March. The following table provides a summary of days-recorded for the period 2004-22.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	19	9	11	8	1	2	9	1	13	6	3	3

* Total number of days-recorded in the period 2004-11 - includes 11 days-recorded in 2007.

Little Owl *Athene noctua* (5, 19, 7) [≥2]

Resident; birds usually seen around the Waterworks and Willows Farm, regularly breeds. The majority of counts (>83%) are of single birds.

Seventeen days-recorded this year - with all records being from the Willow's Farm/Garden Wood area, 2 of these records involved 2 or more birds and the maximum count was of 2 birds on the 14th April and 24th April. The only possible sign of breeding was a juvenile on the driveway to Tyttenhanger House on 20th June which may not have bred on site? A summary of days-recorded and the number of days with more than one bird recorded (Multi bird) are shown for the period 2004-22 in the table below.

	2004-10*	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	49 (2008)	42	26	10	21	32	34	48	73	75	84	56	17
Multi bird	10 (2007)	12	4	1	5	7	0	1	8	19	20	12	2

* Maximum number of days-recorded and multi-bird-days in the period 2004-10 with the relevant year shown in brackets.

Barn Owl *Tyto alba* (5, 12, 2) [All]

Irregular visitor.

Two records for the year of a single bird roosting in the usual tree between Willow's Farm and Tyttenhanger House, on the 9th and 18th January.

Kingfisher *Alcedo atthis* (5, 18; 4) [≥2]

Resident, generally present throughout the year and occasionally breeding on-site or close by. Most records (>83%) are of single birds.

This year produced a total of 59 days-recorded - 83 days when corrected for coverage compared with 44/58 corrected/uncorrected respectively for 2021. The maximum count of the year was of just 2 birds (on 8 separate days) but there were two records of a bird carrying food/faecal sacs (FF) on the 21st May and on the 1st July. The latter strongly suggests that a breeding attempt took place locally despite the lack of subsequent records of young birds/family groups. The following table provides a summary of data from 2010 to 2022 of days-recorded, bird-days and counts of 2 or more birds.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	31	34	18	44	56	77	117	138	104	106	70	44	59
Bird-days	36	37	18	49	63	89	141	171	119	121	81	47	67
Counts ≥2	5	3	0	5	7	10	21	30	15	15	11	3	8

Swift *Apus apus* (5, 19, 300) [≥60]

Relatively common summer visitor with feeding birds present throughout the summer months. Median spring arrival date (2004-22) 27th April; median autumn departure date (2004-22) 13th August.

The first birds of the year were seen on the slightly late date of the 1st May with May proving to be the peak month for this species this year producing a count of 100 on the 11th (the highest of the year) and a further 6 double-figure counts ranging between 17 and 60 birds. Days-recorded for the year was 32 which when corrected for coverage (45) was typical

of most years in the period 2004-22. After May there were only 15 days-recorded with a maximum count of just 12 birds on the 12th June. The last birds of the year were seen on the 29th August – slightly later than the long-term median date of the 13th August. Early and late dates for the period 2004-22 are shown in “Appendix 1A” (page 51) along with long-term median dates for arrival and departure. A summary of days-recorded, significant counts (≥ 60 birds) and the maximum year-counts for the period 2010-22 is shown below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	23	27	19	29	29	26	41	41	38	56	70	40	32
Corr'd Days	26	30	22	35	33	28	44	41	38	57	70	53	45
Maximum	100	300	30	40	30	60	80	100	160	100	100	200	100
≥ 60 birds	1	3	0	0	0	1	2	3	2	1	6	4	3

Green Woodpecker *Picus viridis* (5, 19, 10) [≥ 4]

Common breeding resident.

There were 103 days-recorded this year, which after correction for coverage (144 days) is only just below last year's 145 corrected days-recorded. However, while the days-recorded was relatively good overall numbers appear to be down with just 3 significant counts of 4 or more birds and an average count of just 1.63 birds/day-recorded – the lowest since 2006¹⁵ - which may well indicate that local breeding was poor this year. The maximum count for the year was of 4 birds (on three dates) and the only indication of local breeding was 2 juvenile birds noted on the 9th July. The following table provide a summary of data for days-recorded, corrected days-recorded, significant counts (≥ 4 birds) and average count (bird-days/days-recorded) for the period 2010-22.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	94	90	70	77	112	111	119	141	111	128	201	110	103
Corr'd Days	106	101	82	92	126	122	127	142	111	129	202	145	144
Counts ≥ 4	6	10	4	1	5	13	4	13	12	24	43	12	3
Ave. count	2.01	2.00	1.84	1.70	1.92	2.04	1.96	2.10	2.00	2.24	2.45	1.85	1.63

Lesser Spotted Woodpecker *Dryobates minor* (2, 11 2) [All]

Previously resident and having bred in Garden Wood during that time. Now an irregular visitor.

Addition - 1958. One in Tyttenhanger Park on 2nd February (Trans. Herts Nat. Hist. Soc. Volume 25 Part 3, p80) is currently the first unequivocal record (of any species) we have found for the site¹⁶.

Great Spotted Woodpecker *Dendrocopos major* (5, 19, 6) [≥ 3]

Common breeding resident.

Despite the absence of any breeding records this year, days-recorded (95) after correction for coverage, 134 days, was surprisingly high and second only (after correction) to 2020! The maximum count for the year was of 4 birds on the 3rd, 19th and 25th September with a further 8 (significant) counts of 3 or more birds made between January and October. The following table provide a summary of data for days-recorded, significant counts (≥ 4 birds) and average count (bird-days/days-recorded) for the period 2011-22.

	2004-11	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	102 (2006)	46	48	71	78	73	109	88	108	147	85	95
Corr'd days	120 (2005)	54	57	80	85	78	110	88	109	147	112	134
Counts ≥ 3	13 (2006))	4	1	4	5	3	13	11	30	27	8	11
Ave. count	1.67 (2007)	1.59	1.29	1.34	1.42	1.29	1.50	1.65	2.04	1.80	1.59	1.58

* Maximum number of days-recorded, corrected days-recorded, counts of 3 or more birds and the average count per day-recorded in the period 2004-11 are shown with the relevant year in brackets.

Skylark *Alauda arvensis* (5, 19, 200) [≥ 25]

Breeding resident; also recorded as passage migrant and often forms large winter flocks.

This year saw 82 days-recorded, which after correction for coverage gave a figure of 115 days – which is much the same as most years since 2014. However, the maximum count of the year was of just 15 birds on the 14th January and 19th October the lowest since 2008's 14 birds! As usual, although there were several singing males noted around the site in the early summer there were no ensuing Probable/Confirmed Breeding records. . The following table provides a

¹⁵ Only 2004 (1.51) and 2006 (1.49) have produced lower average counts than this year.

¹⁶ There are some records of birds from as early as 1945 that use “Tyttenhanger” as a location. But as this could also refer to Tyttenhanger Green this would place the record off-site. However, “Tyttenhanger Park” is contained within the boundaries of the current Tyttenhanger GPs and so as this record is the first available from Tyttenhanger Park it is also the first record for the site.

summary of data for days-recorded, corrected days-recorded, maximum count and the number of significant (≥ 25 birds) counts for the period 2004-22.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	120 (2006)	48	66	98	95	96	117	103	124	154	95	82
Corr'd days	140 (2006)	57	79	110	104	103	118	103	125	154	121	115
Maximum	100 (2005)	56	19	43	40	80	60	100	200	45	50	15
≥ 25 Birds	11 (2005)	3	0	4	1	2	6	5	13	3	2	0

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Sand Martin *Riparia riparia* (5, 19; 200) [≥ 50]

Summer visitor that previously bred and has more recently bred locally on Coursers Road. Median arrival date (2004-22) 20th March; median departure date (2004-22) 16th September.

The first birds recorded this year were on the 8th April - almost three weeks later than the long-term (2004-2022) median date of the 19th March. There were subsequently only four double-figure counts for the year and a maximum of 20 birds on the 25th May. All-in-all there were just 30 days-recorded this year (the lowest in the period 2004-22), which, even after correction for coverage, was just 42 days – still the lowest in the period 2004-22! These low numbers may well be due to the failure of this species to breed either on-site or across on Coursers Road GPs this year. Early and late dates for the period 2004-22 are shown in "Appendix 1A" (page 51) along with long-term median dates for arrival and departure. The following table provides a summary of maximum counts for the period 2004-22 for the three migrant hirundines.

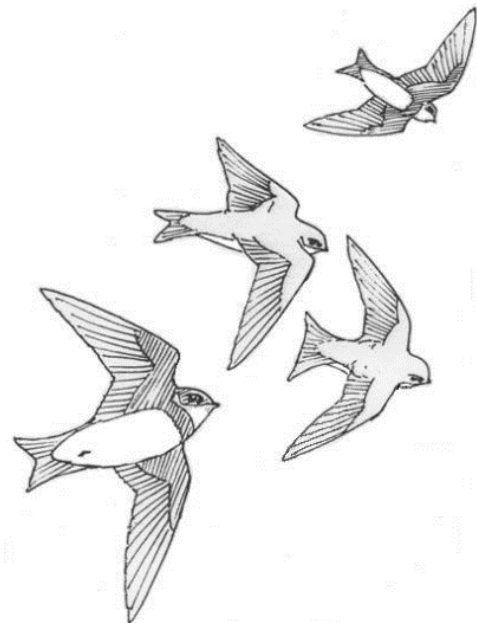
	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Sand Martin	200 (2011)**	50	40	80	50	60	100	40	100	50	50	20
Swallow	300 (2011)	100	100	100	150	200	100	100	100	100	100	25
House Martin	220 (2004)	170	50	80	50	100	100	100	70	70	50	60

* The maximum for each species for the period 2004-11 is shown along with the year in which that value was obtained. ** This value was obtained in both 2007 and 2008.

Swallow *Hirundo rustica* (5, 19, 500) [≥ 50]

Summer visitor with small breeding population centred on Willows Farm. Median arrival date (2004-22) 31st March; median departure date (2004-22) 11th October.

The first bird of the year appeared on the 27th March with birds seen frequently on a further 56 days through until the last birds (8) were seen on the 7th October. There were no breeding records for the site this year and with 58 days recorded (corrected for coverage to 81 days) and a maximum count for the year was of just 25 birds on the 1st May, it would be fair to say this was a pretty ordinary year for this species! Early and late dates for the period 2004-22 are shown in "Appendix 1A" (page 51) along with long-term median dates for arrival and departure. The table above provides a summary of maximum counts for the period 2004-22 for the three migrant hirundines while the table below shows summary data for days-recorded, corrected days-recorded and significant counts (≥ 50 birds) for the period 2004-22.



	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	85 (2005)	49	48	70	82	85	94	87	96	121	71	58
Corr'd days	105 (2005)	58	57	78	90	91	95	87	97	121	94	81
≥ 50 Birds	12 (20010)	6	3	2	4	5	6	4	2	6	1	0

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Correction 2020 – the days-recorded for this species was incorrectly stated to be 79; the correct value is shown in the table above i.e., 121 days.

House Martin *Delichon urbicum* (5, 19, 290) [≥ 60]

Passage migrant with small breeding population previously present on the Colney Heath margins of the site. Median arrival date (2004-22) 10th April; median departure date (2004-22) 5th October.

The first birds of the year were seen on the slightly late date of the 22nd April and the last birds also on the slightly late date of the 9th October. Between these dates birds were recorded on a total of just 23 days with no records at all between the 30th June (week 27) and 20th August (week 34). Although records are less frequent in this period (see

Figure 6) this represents a considerable period without records for this species – a total of 28 days when observers were actually present on-site! The maximum count for the year was of 60 birds on the 10th September. – which was the only significant count (≥60 birds) for the year. Early and late dates for the period 2004-22 are shown in “Appendix 1A” (page 51) along with long-term median dates for arrival and departure. A summary of maximum counts for the period 2004-22 for the three migrant hirundines is provided in the table above under *Sand Martin*.

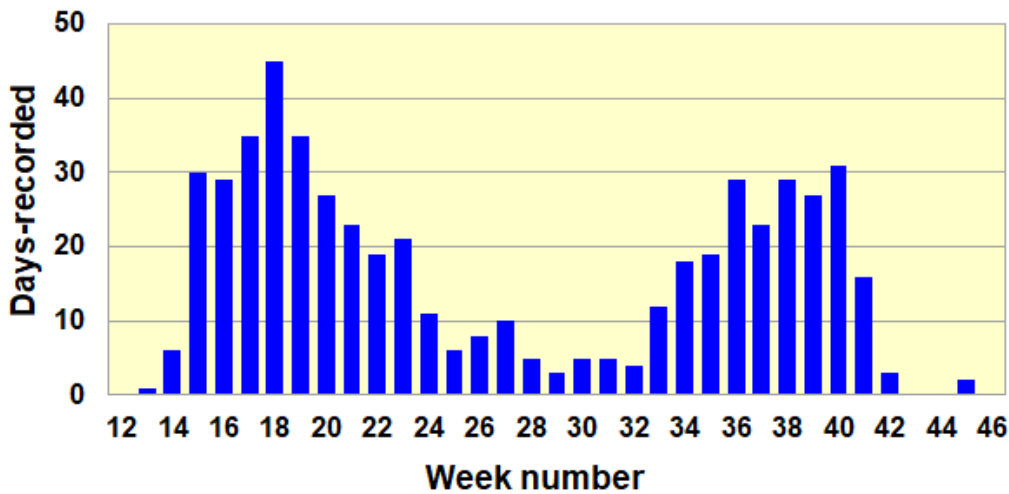


Figure 6. Temporal distribution (by standard week number) of House Martin *Delichon urbica* records for the period 2004-22

Meadow Pipit *Anthus pratensis* (5, 19; 200) [≥40]

Winter visitor and passage migrant, generally absent between May and August; median spring departure date (2004-22) 23rd April; median autumn arrival date (2004-22) 14th September. All records in the summer-period between 2nd May and 7th September (inclusive) are especially notable.

The number of days-recorded this year (35) was a little below the long-term median (2004-22) of 42 days, but after correction for coverage (49 days) it is spot-on the long-term median of 49 days (corrected days-recorded – 2004-22). The last birds of the first winter period was seen on the slightly early date of the 8th April while the first returning birds in the autumn were slightly early on the 2nd September. As with most years there were a couple of records in the May-September window with two birds on the 7th May and then 1 bird on the 8th June. The following table shows summary data for the period 2004-22 of maximum counts, days-recorded, corrected days-recorded and significant counts (≥40 birds)

	2004-11**	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Maximum	80 (2004)	8	37	30	47	55	100	70	100	200	60	60
Days-rec'd	59 (2008)	19	24	29	48	46	73	42	75	76	38	35
Corr'd days	60 (2008)	22	29	33	53	49	74	42	76	76	50	49
≥ 40 Birds	3 (2010)**	0	0	0	3	2	5	3	11	9	2	0

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Yellow Wagtail *Motacilla flava* (5, 19,53) [≥8]

Passage migrant with 1-2 pairs breeding in some years. Median arrival date (2004-22) 11th April; median departure date (2004-22) 19th September.

The first bird of the year was seen on the 15th April with a just further 8 days recorded in the spring/autumn with a maximum count of 6 birds on the 29th April. There was no confirmed breeding this year although there was a record of a bird visiting a probable nest site (N) on Colney Heath Common on the 7th June . The maximum count in autumn was of 4 birds on the 2nd September – which were also the last birds of the autumn, nearly three weeks earlier than the long-term (2004-22) median. All in all, this was a poor year for this species with us having to go back to 2011 to find a year with less corrected days-recorded (11). Early and late dates for the period 2004-22 are shown in “Appendix 1A” (page 51) along with long-term median dates for arrival and departure. The following table shows a summary of data from 2004-2022 for days-recorded, corrected days- recorded and maximum count.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec*	48 (2006)	13	33	22	33	38	28	51	38	55**	40	9
Corr'd days	56 (2006)	15	39	25	36	41	28	51	38	75	53	13
Maximum*	30 (2009)	5	5	2	5	7	6	9	10	16	8	6

* Maximum number of days-recorded, corrected days-recorded and maximum count in the period 2004-11 shown along with the relevant year (in brackets).

White/Pied Wagtail *Motacilla alba* (5, 19; 90) [≥12]

Breeding species present through much of the year with evidence of both spring and autumn passage in most years.

Pied Wagtail. The 89 days-recorded was an improvement over the 70 days-recorded in 2021 and after correction for coverage (125 days) is better than most other years in the period 2004-22 (109 days). The only significant count (≥12 birds) for the year was of 14 birds on the 6th August, but there were confirmed breeding records with recently fledged young seen at Colney Heath Common on the 7th June and a juvenile bird reported on the 10th June.

White Wagtail. There were no records of the nominate subspecies this year.

A summary of days recorded (Pied and White Wagtail), corrected days-recorded (Pied Wagtail) and significant counts (≥12 birds) (Pied Wagtail) across the period 2004-22 is shown in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Pied; Days-rec.	137 (2006)	46	59	79	90	102	138	78	104	130	70	89
Pied; Corr'd days	160 (2006)	54	71	89	99	109	139	78	105	130	92	125
Pied - ≥12 birds	13 (2010)	0	1	0	3	2	5	2	11	2	3	1
White; Days-rec.	11 (2004)	0	2	3	1	11	15	2	2	0	4	0

* Maximum number of days-recorded, corrected days-recorded and maximum count in the period 2004-11 for Pied Wagtail long with days-recorded for White Wagtail; the relevant year for each parameter is shown in brackets.

Grey Wagtail *Motacilla cinerea* (5, 19; 5) [≥3]

Local resident and winter visitor.

With 43 days-recorded (corrected for coverage to 60 days) and confirmed local breeding this was a reasonably good year for this species. There were four counts of three birds this year on the 1st April, 7th May, 20th May and 18th October and four birds a family party on 6th July – with 2 young reported on the 20th May (Main Pit) and 2 adults with 2 young on 6th July (Willow's Farm Lake). The following table shows a summary of data from 2004-2022 for bird-days, days-recorded and corrected days- recorded.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec*	81 (2006)	24	18	14	38	61	49	41	82	76	24	43
Corr'd days	98 (2005)	28	22	16	42	65	49	41	83	76	32	60
Bird-days*	123 (2005)	34	21	19	50	88	67	49	128	103	31	63

* Maximum number of bird-days, days-recorded and corrected days-recorded in the period 2004-11 shown along with the relevant year (in brackets).

Dunnoek *Prunella modularis* (5, 19, 23) [≥8]

Common breeding resident.

The maximum count for the year was of 18 birds on the 18th January with a further 7 days (6 in the period from January to April) producing significant counts (≥8 birds). There were 109 days recorded this year which when corrected for coverage (153 days) has been bettered only by 2006 and 2020 (176 and 183 days respectively)! Overall recording rate was 47.0% - well above the long-term median of 37.6% (range 18.5%-56.4%). Despite the relatively good numbers this year there were no confirmed records of breeding again this year. The following table provides a summary of data from 2004-22 of days-recorded, corrected days-recorded and number of significant (≥8 birds) counts.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	143 (2006)	51	71	104	108	114	139	108	134	182	105	109
Corr'd days	167 (2006)	60	85	117	118	122	140	108	135	183	138	153
Counts ≥8	7 (2006)	2	0	6	7	7	11	12	24	13	10	8

* Maximum number of days-recorded, corrected days-recorded and counts of ≥8 for the period 2004-11 shown along with the relevant year.

Wren *Troglodytes troglodytes* (5, 19, 40) [≥8]

Common breeding resident.

Present throughout the year with 103 days-recorded which was 43.5% of days-covered (median for 2004-2022 is 38.0%). The maximum count for the year was of 9 birds counted across the site on the 24th March and although there were a number of records of singing birds, the only other evidence of breeding was nest building (N) noted on the 24th March.

Robin *Erithacus rubecula* (5, 19, 30) [≥10]

Common breeding resident.

A relatively good year for this species with 128 days-recorded, a maximum count of 22 birds on the 18th January and a

further 9 significant counts (≥ 10 birds) in February (2), March (2), April (1), September (2), October and November. Breeding was confirmed this year with recently fledged young seen on the on the 22nd April and 22nd July.

Stonechat *Saxicola torquata* (5, 18, 6) [≥ 3]

Regular passage migrant and winter visitor mostly from September through until March. Records between April and August are particularly noteworthy.

The poor start to the 2021/22 winter period continued into the first months of this year with just a single bird seen on the 26th February. The second winter period was more productive with birds recorded on 16 days between the 25th September and the 25th November for a total of 33 bird-days. Most records in this period came from the Willows Farm/Pumpkin Patch area and involved multiple birds on all but 4 occasions; the maximum count for the year was of 4 birds (2 pairs) on the 18th. The following table shows a summary from the period 2004-22 for bird-days in the 1st winter period, bird-days in the second winter period and days-recorded.

	2004-11**	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
BDs-1st WP*	40 (2005)	0	1	1	1	0	0	11	2	8	20	1
BDs-2nd WP*	61 (2004)	7	0	10	2	3	27	3	16	45	2	33
Days-rec'd	46 (2008)	7	1	9	3	3	21	14	15	32	17	17

*BDs= bird-days; WP = winter period. ** Maximum number of bird-days in the first winter period (BDs-1st WP), second winter period (BDs-2nd WP) and days-recorded (Days-rec'd) for the period 2004-11 are shown along with the relevant year.

Whinchat *Saxicola rubetra* (4, 18, 7) [All]

Regular passage migrant. Median spring arrival date (2004-22) 30th April; median autumn departure date (2004-22) 13th September; over 80% of records relate to single birds and are from the autumn passage.

With no records at all in 2021 the five records this year (two in the spring and three in the autumn) look like a veritable treasure-trove! All records were as follows – a male in the hedge between the Model Railway and the Main Pit on the 4th May then a female in the same place on 11th May; autumn produced one bird at the back of Lawsons on the 12th August then 2 birds in the Amazing Maize on the 2nd and a single bird on the 3rd September.

Wheatear *Oenanthe oenanthe* (5, 19, 30) [≥ 4]

Regular passage migrant, more frequent in spring. Median arrival date (2004-22) 25th March; median departure date (2004-22) 19th September.

The promise of the early arrival on the 15th March soon fizzled-out and the remainder of spring produced just one more record - 2 birds on the 13th April. Autumn was not much better and produced just three records of single birds on the 11th August, 19th August and 16th September. With just 5 day-recorded and 6 bird days this year ranks as one of the worst in the period 2004-2022 alongside 2005 (4 days-recorded for a total of 9 bird days) and 2020 (7 days-recorded for a total of 8 bird days).

	2004-10*	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Bird-days	9 to 63	56	32	71	18	10	14	17	15	31	8	19	6
Spring BDs	5 to 58	30	30	67	10	7	11	8	11	13	5	14	3

* The range of values in the period 2004-10 are shown for each of the parameters shown.

Blackbird *Turdus merula* (5, 19, 30) [≥ 11]

Common resident and breeding species; also, probably occurs as passage migrant.

Present throughout the year with a maximum count of 16 on the 18th January with a further three significant counts (≥ 11 birds) – one in January and two in April. With 126 days recorded, corrected for coverage to 176 days (median for corrected days-recorded for the period 2004-22 is 132 days) this was a reasonably good recording-year for this species. However, despite the good recording record this year there were no confirmed-breeding records. The table below shows the number of days-recorded, corrected days-recorded and counts of 11 or more birds for the period 2004-22.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	161 (2006)	55	101	121	114	133	131	116	152	196	122	126
Corr'd days	188 (2006)	65	121	136	125	142	132	116	153	197	161	176
Counts ≥ 11	18 (2006)	2	1	0	2	2	4	3	3	18	7	4

* Maximum number of days-recorded, corrected days-recorded and counts of ≥ 8 for the period 2004-11 shown along with the relevant year.

Song Thrush *Turdus philomelos* (5, 19, 17) [≥ 5]

Breeding resident.

Present throughout the year with a maximum count of 8 birds on the 15th May and a further 6 days that produced

significant counts (≥ 5 birds) - with 6 of the 7 counts being in the March-May window. Breeding was confirmed this year by the report of an occupied nest on the 27th March.

Mistle Thrush *Turdus viscivorus* (5, 19, 125) [≥ 14]

Breeding resident and local migrant.

Recorded in all months of the year with the exception of June and December, numbers this year seem to be slightly lower than in the recent past and there were no records indicative of post-breeding aggregations that were such a feature of past years. The maximum count of the year was of just 8 birds on the 30th November although the number of days recorded (36) was relatively good after correction for coverage i.e. 50 days i.e., just above the 2004-22 median value of 46 days. As in most years there were no records of confirmed breeding this year. The following table provides a summary of data for the period 2004-22 for maximum count, days-recorded, corrected days-recorded and recording percentage (days-recorded/days of coverage).

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Maximum	54 (2004)	24	8	14	17	4	15	9	15	22	10	8
Days-rec'd	97 (2006)	24	22	34	42	38	54	29	30	66	24	36
Corr'd days	113 (2006)	28	26	38	46	41	55	29	30	66	32	50
Record %**	34.9 (2006)	8.7	8.1	11.8	14.2	12.5	16.8	9.0	9.3	20.4	9.8	15.5

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained. Record % is the days-recorded/days coverage expressed as a percentage.

Redwing *Turdus iliacus* (5, 19, 1000) [≥ 92]

Common winter visitor and passage migrant. Median spring departure date (2004-22) 30th March; median autumn arrival date (2004-22) 12th October.

The first winter period produced a maximum count of 100 birds on the 18th March which appeared to be birds already on the move however, the last birds of this period lingered on until the relatively late date of the 14th April. The first returning birds of the autumn were seen on the slightly early date of the 1st October with the maximum (127) for the second winter period recorded a few weeks later on the 22nd October. Numbers in both winter period were close to the long-term (2004-22) median values and the only significant counts for the year were the maximum counts in each of the winter period detailed above. The following tables provide summaries of data for the period 2004-22 for monthly maxima and median values (upper table) and days-recorded, corrected days recorded and significant (≥ 92 birds) counts (lower table).

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maxima 2022	40	50	100	13	0	0	0	0	0	127	37	25
Median 2004-22*	50	45	50	0	0	0	0	0	0	80	50	30
Maximum 2004-22*	200	200	125	50	0	0	0	0	40	1000	345	200

* Median and Maximum Monthly Maximum for each month in the period 2004-22.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	52 (2007)	26	36	28	33	39	46	65	69	82	46	49
Corr'd days	68 (2007)	31	45	34	37	42	48	68	74	82	69	79
Counts ≥ 92	3 (2004)	2	2	1	0	2	2	2	8	9	4	2

* Maximum number of days-recorded, days-recorded corrected days-recorded and counts of 100 or more birds for the period 2004-11 shown along with the relevant year.

Fieldfare *Turdus pilaris* (5, 19, 600) [≥ 120]

Common winter visitor and passage migrant. Median spring departure date 7th April (2004-22); median autumn arrival date 21st October (2004-22); all records between May and September are highly notable.

While the 2nd winter period of 2021 did produce a very high count for this species (450 on 5th November) the period overall was quite poor i.e. only 5 other-days recorded with just a maximum of 4 birds. The poor winter for this species continued into this year with a maximum count of just 40 birds on the 18th January and although there were a further 11 days-recorded none of these produced a double-figure count. Figure X shows how the winter of 2021/22 rates against the other winter periods since 2004/05. Despite the low numbers birds were seen in the first half of the year through until the 1st April and birds were seen to return on a fairly typical autumn date of the 19th October. However, things did not really improve dramatically for this species in the second winter period of this year producing just a single double-figure count (10 on the 24th December) from the 9 days-recorded. It remains to be seen what the second half of the 2022/23 winter holds for this species...The following table provides a summary of monthly maxima data for the period 2004-22; Figure 7 summarises days-recorded for each of the winters from 2004/05 through until 2021/22.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maxima 2022	40	6	2	0	0	0	0	0	0	5	3	10
Median 2004-2022*	77	105	65	3	0	0	0	0	0	26	68	50
Maximum 2004-2022*	200	600	300	118	1	0	0	0	5	100	450	100

* Median and Maximum Monthly Maximum for each month in the period 2004-22.

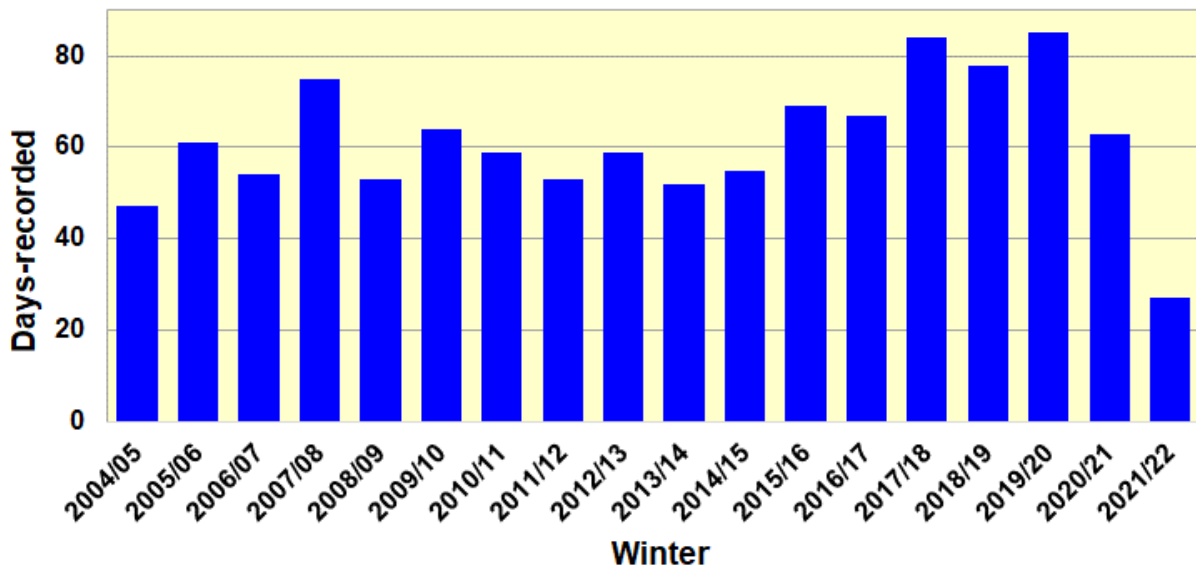


Figure 7. Days-recorded for Fieldfare *Turdus pilaris* for the winters from 2004/05 through until 2021/22.

Cetti's Warbler *Cettia cetti* (4, 4, 2)

Previously rare visitor but becoming an increasingly abundant resident in Hertfordshire and becoming more frequent on-site since the first record in 2018.

A bird heard from the Lower Viewpoint on the 2nd September was the first record since the 8th March 2021 – a gap of almost exactly 18 months. However, as with previous birds this bird seemed to stay and was heard off- and on until the 29th October. However, the next record on the 4th November reported 2 birds that were heard from different locations – with similar records on the 11th, 12th and 13th November. After this a single bird was reported through until the end of the year – but there is every likelihood that the two birds have both moved to the Main Reedbed from where the majority of records derive.

Reed Warbler *Acrocephalus scirpaceus* (5, 19, 20) [≥8]

Summer visitor and breeding species. Median arrival date (2004-22) 19th April; median departure date (2004-22) 10th September.

The first birds (3) of the year appeared on the slightly early date of the 15th April with good numbers through the spring/summer period producing a total of 39 days-recorded and 4 significant counts (≥8 birds) - the largest of which was 13 birds on the 13th May¹⁷. There were confirmed breeding records this year with recently fledged young seen on the 17th June and 6th August. The last bird of the year was seen on the very late date of 3rd October - the latest date in the period 2004-22 and only the second October record for this species. Early and late dates for the period 2004-22 are shown in "Appendix 1A" (page 51) along with the long-term median dates for arrival and departure. A summary of data for days-recorded, corrected days-recorded (summer correction) and mean count (bird-days/days-recorded) from the period 2004-22 is provided in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	43 (2006)	23	41	53	54	45	55	39	65	79	53	39
Corr'd days	49 (2006)	28	49	58	60	50	57	39	67	83	68	55
Mean count	2.85 (2010)	2.39	2.63	2.92	3.11	2.96	2.89	4.33	3.88	3.59	3.21	3.24

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Sedge Warbler *Acrocephalus schoenobaenus* (5, 19, 6) [≥4]

Summer visitor and breeding species. Median spring arrival date (2004-22) 14th April; median autumn departure date (2004-22) 30th August.

Although numbers have stabilised slightly since the low of 2018, this species is still not common on-site and the last

¹⁷ This is the second highest count on record the previous best being 20 birds on the 2nd July 2016.

confirmed breeding was still way-back in 2014. Nevertheless, the first bird of the spring arrived spot-on the long-term (2004-22) median date of the 14th April with the rest of April producing an additional 5 days recorded a maximum count for the year of three birds on the 29th. Although there were a further 4 days-recorded in early May the season petered out with a total of 13 days-recorded and 15 bird-days with the last bird of the year reported on the slightly early date of the 20th August. Early and late dates for the period 2004-22 are shown in "Appendix 1A" (page 51) along with the long-term median dates for arrival and departure. A summary of data for days-recorded, corrected days-recorded (summer correction) and mean count (bird-days/days-recorded) from the period 2004-22 is provided in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	45 (2009)	21	34	24	32	19	20	8	12	22	14	13
Corr'd days	55 (2009)	26	41	26	36	21	22	8	12	24	18	18
Bird-days	87 (2009)	29	78	38	56	39	56	11	16	37	21	15

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Blackcap *Sylvia atricapilla* (5, 19, 25) [≥8]

Common summer visitor and breeding species. Median arrival date (2004-22) 1st April; median departure date (2004-22) 1st October; records between the 21st October and 10th March are considered to involve overwintering birds.

The first presumed migrant of the year was on the relatively early date of the 25th March with birds then reported frequently through the summer months and with a maximum count for the year of 10 birds on the 15th May. Despite a number of singing males noted (a total of 6 around the site on the 13th April) and a continuing presence this year failed to produce and confirmed breeding records. The total days-recorded (51) was slightly down on the previous few years (even after correction) although the recording rate (41.8% of days covered during the summer period) remained relatively high (median for the period 2004-22 is 33.0%). There were no confirmed breeding records this year although the year did provide the 3rd and 4th records of winter birds in the period 2004-22 with birds on the 4th November and 18th November. Early and late dates for migrants in the period 2004-22 are shown in "Appendix 1A" (page 51) along with the long-term median dates for arrival and departure. A summary of data for days-recorded, corrected days-recorded (summer correction) and recording rate (days-recorded/days of coverage in summer) from the period 2004-22 is provided in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	57 (2006)	29	47	53	60	62	68	57	83	98	65	51
Corr'd days	65 (2006)	36	57	58	67	68	70	57	85	103	89	72
Record %	45.6 (2005)	20.7	32.9	34.0	39.0	39.7	40.7	33.1	49.4	60.1	51.5	41.8

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Record % is the number of days-recorded/days of coverage – in this case for the months April-September (summer)

Correction. The recording rates shown in the 2021 table were calculated (incorrectly) from the corrected days-recorded. The values in the above table have been recalculated using the days-recorded/days of coverage (summer).

Lesser Whitethroat *Curruca curruca* (5, 19, 5) [≥3]

Frequent spring migrant/summer visitor showing some breeding success in the recent past. Median arrival date (2004-22) 22nd April; median departure date (2004-22) 7th September.

The first bird of the year arrived on the slightly late date of the 29th April and then small numbers were seen through May and June with a maximum of 4 birds on the 13th May. There were singing birds noted on three dates in June, but there was no further evidence of breeding this year. There were two records after the end of June with two birds on the 27th July and then singles on the 26th August and 22nd September – the latter being a relatively late date for this species. All-in-all a reasonable year for this species and good to see a bit of a rebound from last year's lower numbers. Early and late dates for the period 2004-22 are shown in "Appendix 1A" (page 51) along with long-term median dates for arrival and departure. A summary of days-recorded and bird-days for the period 2004-22 is shown in the table below

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	19 (2009)	8	6	20	18	27	37	31	32	32	16	14
Corr'd days	23 (2009)	10	7	22	20	30	38	31	33	34	18	20
Bird-days	22 (2009)	13	6	22	22	43	74	44	44	39	21	26

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Whitethroat *Curruca communis* (5, 19, 22) [≥12]

Common summer visitor and breeding species. Median arrival date (2004-22) 12th April; median departure date (2004-22) 14th September.

The first bird of the year arrived on the 14th April close to the long-term (2004-22) median date of the 12th April. Numbers quickly rose in the next few of weeks and the with maximum count for the year of 14 birds was made on the 7th May.

Numbers remained good through May and June and it was no surprise that the species bred with recently fledged young reported on the 1st July and 6th August. The last bird of the year was seen on the slightly late date of the 16th September. Although days-recorded/corrected days-recorded were similar to 2021 overall numbers were lower (including the number of counts of 12 or more birds) – but this may be due to factors other than a decline in abundance. Early and late dates for the period 2004-22 are shown in “Appendix 1A” (page 51) along with long-term median dates for arrival and departure. The table below shows a summary of days-recorded, corrected days-recorded, bird-days and significant counts (≥12 birds) for the period 2004-22.



Photo courtesy of Simon West.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	77 (2006)	32	54	60	60	55	60	57	61	89	57	50
Corr'd days	88 (2006)	39	64	66	67	61	62	57	62	94	73	70
Bird-days	327 (2006)	101	195	220	252	236	209	221	306	530	267	171
≥12 birds	5 (2006)	1	0	4	4	2	0	2	2	13	5	1

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Garden Warbler *Sylvia borin* (5, 19, 8) [≥4]

Regular summer visitor and breeding species. Median spring arrival date (2004-22) 24th April; median autumn departure date (2004-22) 25th August.

The first bird of the year was seen on the 15th April (the earliest recorded date for the site) after which a further 21 days-recorded produced a total of 43 bird-days and a maximum count of 5 birds on the 24th April and 6th May. As usual, the hot-spots for this species were mostly around the Main Pit (the Maersk container, the horse paddocks, and Pylon Corner). Breeding was not confirmed for the second year in a row, but with numbers down on the recent past this is no great surprise. Early and late dates for the period 2004-22 are shown in “Appendix 1A” (page 51) along with long-term median dates for arrival and departure. A summary of days-recorded, corrected days-recorded (summer correction), bird-days and significant counts (≥4 birds) for the period 2004-22 is shown in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	25 (2005)	17	32	34	38	37	41	49	43	43	41	22
Corr'd days	31 (2005)	21	38	37	42	41	42	49	44	45	53	31
Bird-days	41 (2009)	26	51	55	61	62	88	90	122	75	101	42
Counts ≥	1**	1	2	1	1	1	4	6	16	0	11	2

* The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

**There were only two counts of ≥4 birds before 2011 – one in 2008 and one in 2009

Chiffchaff *Phylloscopus collybita* (5, 18, 23) [≥9]

Common summer visitor and breeding species; overwintering birds are becoming more regular. Median arrival date (2004-22) 13th March; median departure date (2004-22) 23rd October.

With this species becoming a much more regular species during the winter months (November to February inclusive) it was no surprise that the early part of the year produced a record with a bird seen on the 9th January. The first presumed migrant appeared on the 2nd March with good numbers then recorded through March and April before falling in May and June. There were no signs of breeding activity this year (apart from singing birds¹⁸) and June and July produced just 7 days-recorded with a maximum of just 2 birds recorded. Numbers rose quite dramatically in August and there were 5 counts of 10 birds or more – including a site-record of 40 birds on the 27th August – and then a further 6 and 4 counts of 10 or more birds in September and October respectively. Counts of 28 on the 3rd September and 20 on the 7th October were both records for the month and it is perhaps unsurprising that birds lingered through October and into early

¹⁸ Strangely, although singing males were frequently reported during March there were no records after the 28th March! Presumably given the numbers subsequently reported this was due to recorder-fatigue rather than birds ceasing to sing?

November¹⁹. The winter month then went on to produce 7 days-recorded between the 4th November and 26th December (5 days in November and 2 in December). All-in-all this was a very strange year with just 89 days-recorded but with 20 significant counts – 15 of which were in August (5), September (6) and October (4) - the average count for the year was substantially higher than any previous year! The following table provide a summary of days-recorded, average count (bird-days/days-recorded), number of significant (≥ 9 birds) counts and the number of winter days-recorded (November to February inclusive).

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	84 (2005)	41	42	89	86	110	119	114	130	154	101	89
Ave. count	2.66 (2004)	2.37	2.67	2.61	3.15	3.08	3.16	3.19	3.63	3.51	3.71	5.57
≥ 9 birds	0 **	3	3	4	7	6	6	15	17	11	20	3
Winter Days	11 (2005)	0	0	8	3	15	3	23	20	16	5	10

* Maximum number of days-recorded, average count (bird-days/days-recorded and winter (1st November – 28th February) days-recorded for the period 2004-11 shown along with the relevant year. There were no significant counts recorded between 2004 and 2011 with a maximum count of 7 birds made in 2005, 2007 and 2008.

Willow Warbler *Phylloscopus trochilus* (5, 19, 13) [≥ 4]

Regular summer visitor and breeding species. Median arrival date (2004-22) 3rd April; median departure date (2004-22) 21st September.

While the first birds (2) of the year arrived just slightly later than normal on the 8th April the numbers of the previous three years failed to be replicated this year and only 30 days-recorded for a total of 40 bird-days were produced. The maximum count for the year was of just 4 birds on 20th August and the only breeding record for the year was of a bird "carrying nest material" (N) on the 6th May. The last birds (3) of the year were recorded on the relatively early date of the 7th September. Arrival and departure dates for the period 2004-22 are shown in "Appendix 1A" (page 51) along with the long-term median dates. A summary of data for days-recorded, corrected days-recorded (summer correction), mean count (bird-days/days-recorded) and maximum count from the period 2004-22 is shown in the table below.

	2004-11**	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec.	50 (2006)	13	22	29	30	41	34	23	44	61	43	30
Corr'd days	50 (2006)	16	26	32	34	45	35	23	45	64	55	42
Mean*	2.5 (2006)	1.38	1.14	1.45	1.47	1.59	1.74	1.65	1.50	1.57	1.84	1.33
Maximum	13 (2009)	3	2	4	3	4	5	5	9	6	7	4

* Mean = mean count i.e. Bird-days/Days-rec'd. **The maximum for each parameter from the period 2004-11 is shown along with the year in which that value was obtained.

Goldcrest *Regulus regulus* (5, 19, 12) [≥ 5]

Small resident population supplemented by regular passage migrants and winter visitors; irregular breeder.

With 38 days-recorded this year it was comparable with 2021 and in the longer scheme a reasonably good year i.e., corrected days-recorded was 48 where the long-term median- value is 42 days (range of 21 days (2010) to 68 days – 2019 and 2020). The best count for the year was of 5 birds on the 3rd October - the only significant (≥ 5 birds) count of the year - and there were no confirmed breeding records for the year. The following table shows a summary of days-recorded, corrected days-recorded and average count (bird-days/days-recorded) for the period 2004-22.

Correction- 2021. Values in the above table in the 2021 report were incorrect and had been transposed by a year i.e., 2012 data were shown under 2013 2013 under 2014 etc. etc. The above values are correct

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	44 (2005)	21	22	20	38	33	58	50	71	70	34	38
Corr'd days	53 (2005)	25	25	22	42	33	55	49	68	68	45	48
Ave. count	2.59 (2004)	1.71	1.23	1.35	2.29	1.73	1.76	1.80	2.17	1.90	1.82	1.53

* Maximum number of days-recorded, corrected days-recorded and average counts (bird-days/days-recorded) for the period 2004-11 shown along with the relevant year.

Spotted Flycatcher *Muscicapa striata* (5, 19, 6) [All]

Declining autumn passage migrant; has bred in past years. Median autumn departure date (2004-22) 9th September.

With 3 days-recorded and a total of 4 bird-days - all in the autumn - there was one by pylon corner on 29th July, one on

¹⁹ The last migrant of the autumn has been taken as the bird seen on the 31st October, however with a bird reported on the 4th November and only one day of coverage in between (2nd November) this latter bird may well have been the last migrant of the year.

the 12th August and then 2 birds on the 9th September²⁰. As shown in the following table this is a fairly typical return for this species which last bred on-site in 2006.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	3	2	2	2	6	3	3	3	3	6	4	5	3
Bird-days	4	3	2	2	6	3	3	5	4	6	7	9	4

Pied Flycatcher *Ficedula hypoleuca* (2, 4; 1) [All]

Rare visitor.

With just 4 previous records - all shown below – it was perhaps a big surprise that this year produced 2 records! The first was of a bird reported through Birdguides on the 17th August and then, less than a month later, a juvenile/female-type seen near The Main Pit on the 10th September.

One on 4th September 1998.

One on the 16th September 2010.

One on the 27th August 2013

A male on the 12th April 2021.

One on the 17th August 2022.

A female/juvenile on 10th September 2022.

Long-tailed Tit *Aegithalos caudatus* (5, 19, 35) [≥19]

Common resident and breeding species.

Recorded throughout the year with a maximum of 27 birds seen on the 19th September– there were four other significant counts (≥20 birds) from October (3) and December (1). Breeding records this year comprised nest-building on the 1st May and recently fledged birds on the 15th May. A summary of the number of significant counts in the period 2012-22 is shown in the table below.

Blue Tit *Cyanistes caeruleus* (5, 19, 50) [≥20]

Common resident and breeding species.

A reasonable year for this species with 127 days-recorded (a recording rate of 54.2% of days-covered), a maximum count of 35 birds on the 25th February and a further 10 significant (≥20 birds) counts mostly between January and March (7 counts) but with single significant counts in August, September and November. Numbers were generally good throughout the year -including the breeding season - and so it is a little disappointing that the only breeding record was of a pair visiting a nest-box on the 24th March. A summary of the number of significant counts in the period 2012-22 is shown below.

	Number of Significant counts											Total
	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Long-t'd Tit (≥19)	3	0	1	5	6	9	1	8	16	2	5	77
Coal Tit (≥3)	0	1	3	2	3	4	9	7	10	2	0	47
Blue Tit (≥20)	1	0	3	5	4	4	5	15	21	13	11	101
Great Tit (≥18)	1	1	4	6	2	5	8	9	14	15	12	86

Coal Tit *Periparus ater* (5, 19, 7) [≥3]

Resident and irregular breeding species.

While the other species of tit had reasonably good years this species appears to have had an ordinary year producing just 24 days recorded (a recording rate of 10.3% of days-covered; 2004-22 median of 9.7% with a range of 3.75 to 297.9%) and a maximum count of just 2 birds on three dates (one each in March, June and September). A summary of days-recorded, corrected days-recorded, bird -days and maximum counts data for the period 2004-22 is provided in the table below and data on significant counts in the period 2012-22 in the table above.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	37 (2010)	11	18	32	32	29	37	46	57	90	28	24
Corr'd days	42 (2010)	12	19	29	34	28	33	45	56	90	37	34
Bird-days	55 (2010)	12	23	48	48	43	59	94	87	149	43	27
Maximum	3 (2006-07)	2	3	5	5	3	3	6	5	7	4	2

*The maximum for each parameter from the period 2004-11 is shown along with the year(s) in which that value was obtained.

Great Tit *Parus major* (5, 19, 50) [≥18]

Common resident and breeding species.

As with the above species this was a relatively good year with 123 days-recorded (a recording rate of 53.0% of days-

²⁰ There were two reports on the 9th September – one of a bird at Colney Heath Common and the second “at [the] horse paddocks”. We have treated this as two birds although there is a reasonable likelihood they refer to the same bird.

covered), a maximum count of 30 birds on the 28th June and a further 11 significant counts – 9 in the first quarter of the year and then singles in September and November. However as with the above species there was no Confirmed Breeding this year and the only record indicating breeding was of Courtship and Display (D) on the 15th March. A summary of the number of significant counts in the period 2012-22 is shown in the table above.

Bearded Tit *Panurus biarmicus* (1, 1, 1) [All]

Rare visitor.

A male was initially heard then showed very well in the reed-bed below the high viewpoint on the Main Pit on the 11th March. It was also seen in the same location on the 12th and 14th but unfortunately didn't stay around any longer. This was the 209th species to be added to the Tyttenhanger GPs list and was the first since 2019. A full report from the finder can be found on page 50.

Nuthatch *Sitta europaea* (5, 18, 6) [≥ 3]

Common resident and species that probably breeds in most years; most frequently (68.5%) reported as single birds.

While the reporting rate was reasonably good again this year (17.7% compared with 18.7% in 2021 against a long-term median of 12.6%) there were no reports in July and December and the maximum count for the year was of just three birds on the 17th September. Unsurprisingly there were no breeding records this year which all added-up to a rather disappointing year for this species (especially after the highs of 2020!). The following table provides a summary of data for days-recorded and recording rate for the period 2004-22.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	47 (2007)	15	17	17	25	35	51	46	41	82	46	41
Record rate(%)	17.0 (2007)	5.5	6.3	5.9	8.4	11.6	15.9	14.2	12.8	25.4	18.7	17.7

*The maximum for each parameter from the period 2004-11 is shown along with the year(s) in which that value was obtained.

Treecreeper *Certhia familiaris* (5, 19, 10) [≥ 2]

Resident and probable breeding species in most years; most counts (69.8%) have been of single birds.

A somewhat secretive species at the best of times this year was fairly typical of the last 19 years producing a recording rate of 6.03% - a little higher than the long-term (2004-22) median value of 5.19%. The maximum count for the year was of 3 birds on the 17th June – all other counts being of just single birds. The following table provides a summary of data for days-recorded and recording rate for the period 2004-22.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	22 (2006)	7	10	15	12	7	16	10	21	52	18	14
Record rate (%)	8.02 (2005)	2.55	3.69	5.19	4.05	2.31	4.98	3.09	6.54	16.1	7.32	6.03

*The maximum for each parameter from the period 2004-11 is shown along with the year(s) in which that value was obtained

Magpie *Pica pica* (5, 19, 75) [≥ 21]

Common resident.

The last few years has seen a dramatic rise in the number of significant counts for this species (see Table below) without an associated rise in recording rate suggesting that observers have become more inclined to count and report the numbers²¹. So, it is not therefore surprising that a maximum count of 46 birds on the 19th February was reported along with a further 20 significant counts (21 or more birds) being made - most (16) of these in the first 4 months of the year. The only breeding record for the year was of an occupied nest reported on the 27th March. A summary of recording rate (days-recorded/days-covered) along with the number of significant counts (≥ 21 birds) is shown for the period 2011-22 in the table below. A summary of maximum counts for this and the other common corvids for the period 2004-22 is shown under the summary for Jackdaw.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Record rate (%)	27.7	22.5	36.2	45.0	44.6	47.2	44.5	36.4	50.2	65.9	54.1	56.5
≥ 21 birds	5	1	1	1	7	1	0	3	8	15	10	21

Jay *Garrulus glandarius* (5, 19, 15) [≥ 4]

Common resident with a noticeable autumn passage in some years and significant counts most notably between weeks 36 and week 46 (2nd September – 17th November).

The 81 days-recorded this year was very comparable with the 82 of 2021 - but numbers were generally lower this year

²¹ There is certainly no evidence in the BTO trend data (https://data.bto.org/trends_explorer/) to suggest this species has shown a dramatic increase in abundance across the UK in the recent past and so the rapid rise in significant counts would seem to be due to observer-driven effects rather than a real population change.

with a maximum count of just 7 birds on the 19th October and 5 further significant (≥ 4 birds) counts²² – each of 4 birds – mostly made in the late-autumn passage window (September to November). The only breeding record for the year was of agitated behaviour (A) on the 12th March. The following table provides a summary of data from 2010-22 for days-recorded, average count and counts of 4 or more birds.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	73	57	65	59	76	64	70	91	85	92	154	82	81
Ave. count	2.04	1.81	2.66	1.71	2.07	1.55	1.57	2.07	2.15	2.29	1.95	2.38	1.78
Counts ≥ 4	10	5	11	3	10	1	3	12	11	18	23	16	6

Jackdaw *Coloeus monedula* (5, 19, 500) [≥ 120]

Local breeder and common visitor to the site.

With 9 counts of 100 birds or more (7 significant counts of 120 or more birds) this is still far-and-away the most common corvid on-site and possibly the most abundant species overall? The maximum count for the year was of 300 birds on the 3rd September with other significant counts in January (3), August (1), September (1) and October (1). The only breeding record for the year was of a bird visiting a probable nest site on the 12th March A summary of maximum counts for this and the other common corvids for the period 2004-22 is shown in the table below.

	2004-11	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Magpie	24 (2006)	36	22	23	31	36	15	60	75	50	35	46
Carrion Crow	250 (2006)	44	70	100	150	130	100	110	150	115	70	98
Rook	108 (2005)	117	80	50	56	50	40	20	10	50	34	135
Jackdaw	500 (2006)	280	100	70	350	400	300	310	500	300	200	300

*The maximum for each species from the period 2004-11 is shown along with the year(s) in which that value was obtained.

Raven *Corvus corax* (5, 11, 2) [All]

Irregular visitor – seemingly becoming more frequent as the species spreads within the UK. First recorded in 2009.

After a bumper 2021 this year was more typical of the recent past producing three days-recorded and 5 bird-days: 2 birds on the 9th January, a single bird on the 2nd April and 2 birds on the 29th April. April and September are still the best months for this species with a total of 9 days-recorded in each of these months.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	0	2	0	3	1	1	4	9	4	6	6	8	3
Bird-days	0	3	0	5	2	1	5	14	5	7	7	12	5

Rook *Corvus frugilegus* (5, 19, 117) [≥ 35]

Local breeder and frequent visitor to the site.

The maximum count for the year was of 135 birds reported on the 28th January heading off to the east to roost. This is only the third count of 100 or more birds in the period 2004-22 and the first since 2012. As per usual there were no breeding records on-site with the 2021 [Hertfordshire Rookeries Survey](#) showing the closest rookery being on Shenley Lane in London Colney. The following table provides a summary of days-recorded data and recording rate (days-recorded/days-coverage) for the period 2004-22. A summary of maximum counts for this and the other common corvids for the period 2004-22 is shown in the table above under Jackdaw.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	71 (2006)	40	18	11	26	8	20	17	24	42	15	35
Record rate (%)	24.4 (2005)	14.5	6.6	3.8	8.8	2.6	6.2	5.2	7.5	13.0	6.1	15.9

*The maximum for each parameter from the period 2004-11 is shown along with the year(s) in which that value was obtained

Carrion Crow *Corvus corone* (5, 19, 500) [≥ 50]

Common resident.

Present throughout the year with a recording rate of 57.3% (the 2004-22 median is 43.9 and the range 17.4% to 64.1%) and a maximum count for the year of 98 birds on the 29th January this was a reasonable year for this species. There were another 4 significant (≥ 50 birds) counts for the year (2 in January, and one in each of February and October), but unfortunately no breeding records.

²² Significant count data are revised each year as new data for that year are added. In the case of this species the data from this year meant the significant count was revised from 5 birds to 4 birds – which dramatically increased the total number of significant counts for this species across the period 2004-22.

Correction: The maximum count for this species has been shown as 250 birds for several years now but should have been reported as 500.

Starling *Sturnus vulgaris* (5, 19, 10000) [≥ 200]

Common resident and winter visitor; a large roost formed in the reed-bed on the Main Pit winter of 2020/21 that attracted some large crowds.

The winter of 2021/22 did not produce the numbers of the previous winter (2020/21) and things were relatively quiet through until August when a roost was noted in the Reed-bed on the Main Pit. A similar thing happened in 2021 when number built through August up to a total of around 1500 birds. Unfortunately, numbers were not as impressive this year and the highest count (also the highest count for the year) was of 650 birds coming out of the roost on the morning of the 29th August. Numbers fell after this and there was no significant roost forming again in the colder months. A summary of maximum counts for the period 2004-22 is shown below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Maximum	400	500	250	380	500	450	450	150	200	2500	2500	650

*The maximum for from the period 2004-11; maximum counts of 400 were made in 2006, 2009 and 2011.

Tree Sparrow *Passer montanus* (5, 19, 100) [≥ 14]

Breeding resident and frequent visitor from the nearby breeding population at Coursers Road; recent indications are of a dramatic decline.

The year appeared to start where 2021 left-off with small (up to 2 birds) numbers regularly seen in the first three months of the year – mostly at the feeding station near Tyttenhanger Farm. The last birds (2) of the year were seen on the 1st April making a total of 17 days-recorded and 31 bird-days. The maximum count for the years was 2 birds and looking at the records it seems that all of the records could well have referred to the same two birds! It remains to be seen if the species will reappear in the near future, but we think it would be fair to say that it is unlikely the species will return on a regular basis. A summary of days-recorded, corrected days-recorded, counts of 10 or more birds (≥ 10 birds) and maximum counts for the period 2010-22 are shown in the table below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	98	63	37	41	179	169	135	138	163	191	137	115	17
Corr'd days	111	71	44	49	161	185	143	138	163	192	136	151	24
≥ 10 birds	3	2	2	1	35	36	9	24	31	47	22	2	0
Max. count	10	12	13	28	19	32	24	26	25	23	20	10	2

House Sparrow *Passer domesticus* (5, 19, 40) [≥ 12]

Small resident populations around Willows Farm and in Colney Heath.

A good year for records of this species with 61 days-recorded, a maximum count of 20 birds on the 3rd September and three other significant counts (≥ 12 birds) for the year. However, on the downside, unlike 2021 there were no breeding records this year. A summary of maximum counts and days-recorded data from the period 20010-22 is shown in the table below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	45	27	12	26	18	37	41	38	23	62	63	31	61
Corr'd days	51	30	14	31	20	41	44	38	23	63	63	41	85
Maximum	15	20	18	6	10	14	20	15	15	20	14	10	20

Brambling *Fringilla montifringilla* (5, 14, 11) [All]

Regular/irruptive winter visitor. Nearly 70% of records are from the second winter period.

There were 15 records for the year - 1 in January, 5 in February, 6 in March, 1 in April and 2 in December. Birds were reported mainly from the Amazing Maize (12) and the majority of records in the first winter period referred to a single bird – a female (presumably the same bird?). The 13 days-recorded in the first winter period is a record for that period the next best being 2010 with 5 days-recorded – while the 17 days-recorded for the winter of 2021/22 is the second best since 2004/05 behind the 18 days-recorded of 2017/18! The maximum count for the year was of 3 birds (no sex given) on the 26th January with four other records involving two birds; the 2 birds seen on the 8th April are the second latest spring record in the period 2004-22²³. A summary of days-recorded and bird-days data from the period 2004-22 is shown in the table below.

²³ The latest was on the 13th April 2005.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	16 (2010)	0	0	1	0	0	17	1	3	6	4	15
Bird-days	4 (2007)	0	0	1	0	0	28	1	4	6	15	21

* Maximum number of bird-days and days-recorded for the years 2004-11 inclusive, with the relevant year shown in brackets.

Chaffinch *Fringilla coelebs* (5, 19; 200) [≥ 40]

Common resident and breeding species with winter flocks commonly noted.

A large flock developed in the early months of the year around the Amazing Maze field that produced a series of counts the like of which haven't been seen since 2012. In the period from the 1st January to the 6th March there were counts of 150 on the 26th January (the highest for the year) and counts of 100 on the 22nd February and 4th March along with a further 11 significant counts (≥ 40 birds). The latter part of the year was not as impressive but did produce counts of 50 birds on the 18th and 22nd November. As in most years, there were no confirmed breeding records this year. The following table provides a summary of days-recorded, counts of 40 or more birds and maximum count data from the period 2004-22.

Correction - 2021. The text for this species in the 2021 report stated there were 78 days-recorded which was incorrect and should have read "81 days-recorded" - as was correctly shown in the table.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	150 (2006)	62	87	100	89	100	116	106	121	175	81	93
≥ 40 birds	7 (2009)	6	2	3	0	4	5	2	7	3	1	16
Maximum	150 **	200	79	80	45	50	60	50	70	52	40	150

* Maximum count, number of bird-days and days-recorded for the years 2004-11 inclusive with the relevant year for each parameter shown in brackets. ** Maximum counts of 150 birds were made in 2009, 2010 and 2011.

Bullfinch *Pyrrhula pyrrhula* (5, 19, 12) [≥ 4]

Resident, probably breeds in most years. Most commonly reported in the winter months, often in small flocks; only 42.6% of records relate to single birds.

This remained an elusive species in 2021 and with just 24 days-recorded and a total of 42 bird-days it is hardly surprising there were three months of the year (February, March and October) when it went unrecorded. Nevertheless, given the very poor year in 2021 it was good to see the average count average count rise to 1.75 birds and the reporting rate rise to 10.3%. The maximum count for the year was of 4 birds on 8th December and there were no breeding records for the year. A summary of data for recording rate (days-recorded/days-covered), days-recorded, bird-days and average count (bird-days/days-recorded) from the period 2011-22 is shown in the table below.

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Record rate (%)	10.4	12.7	10.0	10.4	16.6	13.5	20.2	16.0	23.4	15.2	4.5	10.3
Days-recorded	30	35	27	30	49	41	65	52	75	48	11	24
Bird-days	51	58	51	60	88	87	112	100	124	81	17	42
Average count*	1.70	1.66	1.89	2.00	1.80	2.12	1.72	1.92	1.65	1.65	1.55	1.72

* Average count = Bird-days/days-recorded; the long-term (2004-22) average is 1.85 birds.

Greenfinch *Chloris chloris* (5, 19, 116) [≥ 15]

Common resident and probable breeding species in most years.

Numbers this year were more representative of the last decade than those of 2019 and 2020 and the maximum count of 7 birds on the 24th December and no significant counts is typical of this time. Strangely, there were records of a singing bird on the 15th and 24th March when perhaps more obvious species were not recorded as singing this year. Nonetheless, as usual singing males were no indication of further breeding records to come! . A summary of days-recorded, maximum count and significant count (≥ 15 birds) data for the period 2004-22 is provided in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	108 (2006)**	21	35	26	12	24	40	45	75	143	49	55
Maximum	70 (2011)	4	7	8	5	5	5	8	116	20	5	7
≥ 15 birds	7 (2005)	0	0	0	0	0	0	0	14	2	0	0

* Maximum count and maximum days-recorded for the years 2004-11 with the relevant year for the maximum shown in brackets.

** 2007 also had 108 days-recorded.

Goldfinch *Carduelis carduelis* (5, 19, 104) [≥26]*Common resident and breeding species.*

The first winter period produced a maximum count of just 20 birds on the 9th January – these low counts flowing through to the summer months where no breeding of this species was recorded for the first time since 2018. The second winter period was slightly more productive with a maximum count of 40 birds on the 16th September and two further significant counts (≥26 birds) on the 11th September (35) and 24th December (38). A summary of days-recorded, maximum counts and significant counts (≥26 birds) from the period 2004- 22 is shown in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	102 (2009)	64	84	98	103	113	141	109	135	173	105	112
Maximum	52 (2010)	50	89	100	50	104	70	38	40	65	42	40
≥26 birds	5 (2006)**	2	6	15	8	2	13	4	4	6	2	3

* Maximum days-recorded, maximum count and maximum number of significant counts (≥26 birds) for the years 2004-11 are shown along with the relevant year. ** Both 2006 and 2010 recorded 5 significant counts.

Linnet *Linaria cannabina* (5, 19, 350) [≥80]*Common resident and breeding species; large winter flocks often present.*

The year got off to a flying start with a maximum count for the year of 150 birds coming on the 3rd January – this being the highest count since August 25th 2019! Numbers were then good through until early April but without generating any significant counts (≥80 birds). Birds were then present throughout the summer months but the only breeding record for the year was of nest building observed on the 1st May. Numbers built up again from early September reaching 80 birds on the 25th November and the maximum count for the second winter period of 110 birds on the 30th November. A summary of days-recorded and significant count data (≥80 birds) from the period 2004- 22 is shown in the table below.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	120 (2005)	50	64	60	72	102	108	93	122	128	54	72
≥80 birds	12 (2010)	2	2	4	2	4	2	13	33	0	0	3

* Maximum count, maximum days-recorded and maximum number of counts of 20 or more birds (≥80 birds) for the years 2004-11 are shown along with the relevant year.

Siskin *Spinus spinus* (5, 19, 120) [≥51]*Frequent winter visitor - commonly along the River Colne at Colney Heath and more recently in Garden Wood. Median spring departure date (2004-22) 25th March; median autumn arrival date (2004-22) 14th October.*

The first winter period produced 16 days-recorded – pretty much in keeping with the recent past with a maximum count of 120 on the 21st January and 5th March - both from Colney Heath Common and matching the previous best count back on the 12th December 2009. The last bird of spring was seen on the 25th March (the long-term median date) and birds were next seen again on the 19th October close to the normal autumn return date of the 14th October. The second winter period produced just 4 days-recorded and a maximum count of just 6 birds on the 11th November. Early and late dates for the period 2004-22 are shown in "Appendix 1B" (page 53) while the following table provides a summary of data for days recorded (split across the 1st and 2nd winter periods) and maximum counts for the years 2010-2022.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
1st WP days	4	9	3	2	1	1	7	9	10	15	18	12	16
2nd WP days	5	8	5	2	0	10	5	19	16	13	35	8	4
Maximum	80	60	60	9	14	60	50	30	30	80	60	30	120

Lesser Redpoll *Acanthis cabaret* (5, 19, 80) [≥20]*Regular winter visitor. Median spring departure date (2004-22) 22nd March; median autumn arrival date (2004-22) 19th October. Records between 22nd April and 1st October are especially notable.*

A below average year for this species with just 5 days-recorded (median for the period 2004-22 is 17 days) and no significant counts (≥20 birds) for the year. In fact, the maximum count for the year was of just 2 birds – seen on 4 of 5 days-recorded. Despite the low numbers the latest spring bird was seen on the 5th March and the first bird of the autumn on the median date of 19th October. A summary of days-recorded and significant counts (≥20 birds) for the period 2004-22 is shown in the table below; "Appendix 1B" (page 53) provides a summary of spring departure and autumn arrival dates.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	20 (2006)	37	49	5	16	41	34	35	19	47	13	5
≥20 birds	0	2	4	0	0	3	1	0	1	10	1	0

* Maximum number of days-recorded 2004-11 are shown along with the relevant year; there were no significant counts (≥20 birds) in the period 2004-11.

Reed Bunting *Emberiza schoeniclus* (5, 19, 50) [≥ 7]

Resident with a small number of breeding pairs in most of the last several years.

This was the first year since 2017 this species has failed to produce any confirmed breeding records but despite the lack of breeding activity was still seen frequently throughout the year. In total there were 86 days-recorded for a total of 203 bird-days with a maximum count for the year was 15 birds on the 26th January. A summary of days-recorded, corrected days-recorded and maximum counts for the period 2010-22 is shown in the table below.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	76	63	58	67	96	81	82	108	87	117	134	74	86
Corr'd days	85	71	67	78	93	89	88	109	87	118	135	97	120
Maximum	12	11	14	12	6	15	10	15	13	18	50	15	15

Yellowhammer *Emberiza citrinella* (5, 19, 50) [≥ 20]

Winter visitor generally around the Tyttenhanger Farm area. Has declined significantly since 2012 and all records currently considered notable.

The status of this species at Tyttenhanger GPs has, over the recent past been rather enigmatic – this year proving no exception! .Ostensibly, with 24 days recorded (corrected to 34 days which is also the long-term median for corrected days-recorded) this would seem to be a rather average year. A maximum count of just 3 birds (the last double-figure count was in 2012) and an average count (bird-days/days-recorded) of 1.71 (similar to most of the years since 2012) indicate that while less common than in the past it is still relatively stable. It was therefore a little surprising that this year while producing a record of a singing bird on the 30th March also provided further breeding evidence with a female seen carrying nest material (B) on the 23rd April! The following table provides a summary of data from 2004-22 of days-recorded, bird-days and counts of 10 or more birds.

	2004-11*	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Days-rec'd	65 (2006)	34	10	2	8	18	21	26	10	33	47	24
Bird-days	598 (2009)	156	16	8	8	22	28	39	10	56	80	41
≥ 10 birds	23 (2009)	3	0	0	0	0	0	0	0	0	0	0

* Maximum count, maximum days-recorded and maximum counts of 10 or more birds (≥ 10 birds) for the years 2004-11 are shown with the relevant year for the maximum shown in brackets.

Escapes & Birds of Uncertain Origin

Domestic (White) Goose *Anser sp.*

The number of records (19) of this group of residents increased (just 8 records in 2021) but with a maximum count of just 4 adult birds it would seem that they are still in decline i.e. 2020 produced several counts of 20 birds and breeding was also confirmed. Nevertheless, breeding records this year indicate there were 2 pairs nesting on the Fishing Lakes albeit only one pair appeared to produce young i.e. 2 adults seen with 4 young on the 22nd April. Numbers later in the year (just 4 birds) suggest that the young failed to fledge.

Black Swan *Cygnus atratus*

A single bird at Willows Farm Lake on the 11th February.

Bearded Tit – A First Record for Tyttenhanger GPs

Rupert Evershed



On Friday morning 11th March 2022 Steve Blake and I were doing our usual circuit of the pits, starting at Willows Farm car park and making our way along the Fishing Lakes towards the Main Pit. The usual birds were in evidence with signs of the season in the form of lingering **Fieldfare** and **Redwing** and 3 flyover **Siskins**. A third **Oystercatcher** had also arrived to challenge the pair that had arrived back in mid-February and were flying around noisily.

As we made our way along the northern end of the Fishing Lake, we picked up a small goose flying south along the lake – a **Brent** Goose! I had not seen one at the site since I had a flyover flock of about 30 birds in

Photo courtesy of Rupert Evershed

the 1990s, so this was definitely a turn-up for the books and a good omen for what was to come. The goose settled on Willows Farm Lake and allowed closer views and photographs (see page 16) before it headed off in a northerly direction.

We continued our circuit around Main Pit with Steven Pearce joining us and as we approached the reedy corner below the high viewpoint a distinctive 'ping ping' call stopped me in my tracks. "**Bearded Tit!**" I shouted in excitement and, sure enough, a beautiful male made his way to the edge of the reeds. We had excellent views of this site first and a wonderful bird to set eyes on at any time.

Initially showing well and responding to playback calls the **Bearded Tit** did become more elusive but stayed over the weekend allowing others to connect and for some to get good views. The bird was last heard to call on Monday the 14th March but it marks another milestone in the pits natural history giving hope that they might one day breed at Tyttenhanger.

APPENDIX 1

ARRIVAL AND DEPARTURE DATES FOR COMMON MIGRANTS

Appendix 1A – Summary of spring arrival dates and autumn departure dates for common migrants and breeding visitors at Tyttenhanger GP covering the period 2004-2022. The earliest spring (E) and latest autumn (L) dates recorded on site are shown in the column labelled E/L – these dates and the corresponding dates in the body of the table (if present) are shaded green and blue respectively; where E/L date is from prior to 2011 it is shaded in yellow. Median dates are shown for the period 2004-22. Where no dates (ND) are available these are indicated by the grey shaded boxes.

Species	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	E/L	Median
Hobby	5 th May	8 th May	21 st Apr	2 nd May	1 st May	18 th May	29 th Apr	29 th Apr	26 th Apr	26 th Apr	23 rd Apr	1 st Apr	29 th Apr
	21 st Sep	7 th Oct	15 th Oct	11 th Oct	3 rd Oct	11 th Sep	28 th Sep	15 th Oct	26 th Sep	27 th Sep	27 th Sep	15 th Oct	27 th Sep
Oyster-catcher	3 rd Mar	7 th Mar	22 nd Feb	7 th Mar	5 th Mar	18 th Feb	9 th Mar	12 th Feb	3 rd Feb	26 th Feb	13 th Feb	3 rd Feb	1 st Mar
	29 th Aug	28 th Jul	12 th Jul	30 th Aug	25 th Jul	21 st Aug	25 th Jun	27 th Jul	28 th Jul	27 th Jun	6 th Jul	30 th Aug	22 nd Jul
Ringed Plover	19 th Feb	10 th May	30 th Mar	2 nd Apr	3 rd Apr	8 th Feb	22 nd Apr	ND	ND	ND	ND	16 th Jan	23 rd Feb
	19 th Aug	29 th Aug	22 nd Nov	23 rd Aug	19 th Aug	6 th Sep	8 th Sep	ND	ND	ND	ND	22 nd Nov	6 th Sep
Little Ringed Plover	2 nd Apr	15 th Apr	8 th Apr	9 th Apr	3 rd Apr	20 th Mar	9 th Mar	1 st Apr	ND	ND	ND	9 th Mar	30 th Mar
	30 th Aug	17 th Aug	17 th Aug	9 th Aug	30 th Jul	12 th Jul	14 th Aug	6 th Jul	18 th Jul	ND	ND	1 st Oct	9 th Aug
Redshank	1 st Mar	7 th Mar	8 th Mar	13 th Mar	19 th Mar	12 th Mar	12 th Mar	17 th Mar	14 th Mar	8 th Mar	2 nd Mar	23 rd Feb	8 th Mar
	12 th Jul	10 th Sep	25 th Jun	9 th Jul	23 rd Nov	25 th Sep	27 th Jul	18 th Jul	ND	ND	ND	23 rd Nov	24 th Jul
Common Sandpiper	11 th Apr	16 th Apr	30 th Mar	12 th Apr	19 th Apr	17 th Apr	16 th Apr	19 th Apr	22 nd Apr	30 th Apr	29 th Apr	28 th Mar	16 th Apr
	28 th Sep	7 th Oct	27 th Oct	14 th Sep	13 th Nov	15 th Sep	7 th Oct	29 th Sep	15 th Sep	12 th Sep	16 th Oct	13 th Nov	28 th Sep
Common Tern	11 th Apr	7 th Apr	9 th Apr	16 th Apr	11 th Apr	15 th Apr	19 th Apr	20 th Apr	24 th Apr	23 rd Apr	23 rd Apr	3 rd Apr	13 th Apr
	3 rd Sep	26 th Aug	22 nd Sep	15 th Sep	24 th Sep	22 nd Aug	14 th Sep	14 th Aug	24 th Aug	3 rd Sep	21 st Aug	27 th Sep	3 rd Sep
Cuckoo	19 th Apr	24 th Apr	19 th Apr	16 th Apr	19 th Apr	22 nd Apr	24 th April	1 st May	24 th Apr	30 th Apr	18 th Apr	25 th Mar	19 th Apr
	NA	16 th Aug	19 th Sep	5 th Jul	4 th Jun	2 nd Jun	NA	5 th Aug	18 th Aug	ND	ND	25 th Sep	9 th Aug
Swift	26 th Apr	27 th Apr	3 rd May	6 th May	18 th Apr	29 th Apr	21 st Apr	24 th Apr	22 nd Apr	25 th Apr	1 st May	18 th Apr	27 th Apr
	21 st Jul	28 th Jul	26 th Aug	29 th Aug	10 th Aug	9 th Sep	18 th Aug	12 th Sep	29 th Aug	13 th Aug	29 th Aug	12 th Sep	13 th Aug

Appendix 1A – continued.

Species	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	E/L	Median
Sand Martin	17 th Mar	13 th Apr	20 th Mar	18 th Mar	25 th Mar	11 th Mar	16 th Mar	17 th Mar	15 th Mar	18 th Mar	8 th Apr	11 th Mar	20 th Mar
	1 st Sep	15 th Sep	4 th Sep	14 th Sep	23 rd Sep	23 rd Sep	16 th Sep	10 th Sep	2 nd Oct	29 th Sep	19 th Sep	7 th Oct	16 th Sep
Swallow	31 st Mar	13 th Apr	29 th Mar	3 rd Apr	26 th Mar	29 th Mar	3 rd Apr	31 st Mar	1 st Apr	1 st Apr	17 th Mar	25 th Mar	31 st Mar
	20 th Oct	6 th Oct	12 th Oct	19 th Oct	14 th Oct	20 th Oct	7 th Oct	27 th Oct	24 th Oct	8 th Oct	7 th Oct	27 th Oct	11 th Oct
House Martin	17 th Apr	13 th Apr	10 th Apr	11 th Apr	8 th Apr	1 st Apr	6 th Apr	2 nd Apr	10 th Apr	31 st Mar	10 th Apr	31 st Mar	10 th Apr
	2 nd Oct	22 nd Sep	24 th Sep	24 th Sep	1 st Oct	5 th Oct	23 rd Sep	5 th Oct	11 th Oct	8 th Oct	9 th Oct	5 th Nov	5 th Oct
Yellow Wagtail	17 th Apr	15 th Apr	11 th Apr	11 th Apr	5 th Apr	14 th Apr	5 th Apr	8 th Apr	16 th Apr	12 th Apr	15 th Apr	30 th Mar	11 th Apr
	19 th Sep	14 th Sep	1 st Sep	19 th Sep	30 th Sep	16 th Sep	27 th Sep	18 th Sep	16 th Oct	24 th Sep	2 nd Sep	5 th Oct	19 th Sep
Whinchat	ND	19 th Apr	ND	1 st May	ND	29 th Apr	18 th Apr	7 th May	ND	ND	4 th May	14 th Apr	30 th Apr
	26 th Sep	31 st Aug	19 th Oct	13 th Sep	13 th Sep	16 th Sep	8 th Sep	17 th Sep	31 st Aug	ND	3 rd Sep	19 th Oct	13 th Sep
Wheatear	17 th Mar	30 th Mar	19 th Mar	9 th Apr	2 nd Apr	3 rd Apr	16 th Apr	19 th Mar	16 th Apr	26 th Mar	15 th Mar	14 th Mar	25 th Mar
	4 th Oct	18 th Sep	25 th Sep	1 st Sep	21 st Sep	17 th Sep	19 th Sep	17 th Sep	18 th Sep	1 st Oct	16 th Sep	8 th Oct	19 th Sep
Sedge Warbler	13 th Apr	15 th Apr	19 th Apr	11 th Apr	12 th Apr	14 th Apr	10 th Apr	18 th Apr	23 rd Apr	16 th Apr	14 th Apr	7 th Apr	14 th Apr
	21 st Aug	17 th Sep	6 th Sep	25 th Aug	ND	21 st Aug	31 st Aug	14 th Sep	30 th Aug	10 th Sep	20 th Aug	17 th Sep	30 th Aug
Reed Warbler	20 th Apr	16 th Apr	18 th Apr	15 th Apr	19 th Apr	15 th Apr	20 th Apr	18 th Apr	16 th Apr	16 th Apr	15 th Apr	10 th Apr	19 th Apr
	28 th Sep	6 th Aug	19 th Sep	17 th Aug	12 th Sep	6 th Sep	16 th Sep	1 st Oct	9 th Sep	10 th Sep	3 rd Oct	28 th Sep	10 th Sep
Blackcap	30 th Mar	14 th Apr	2 nd Apr	7 th Apr	1 st Apr	30 th Mar	5 th Apr	22 nd Mar	12 th Mar	18 th Mar	25 th Mar	12 th Mar	1 st Apr
	30 th Oct	6 th Oct	18 th Oct	27 th Sep	14 th Sep	7 th Oct	30 th Sep	1 st Oct	10 th Oct	8 th Oct	17 th Sep	30 th Oct	1 st Oct
Garden Warbler	5 th May	23 rd Apr	22 nd Apr	24 th Apr	23 rd Apr	20 th Apr	21 st Apr	4 th May	19 th Apr	23 rd Apr	15 th Apr	15 th Apr	24 th Apr
	25 th Aug	28 th Jul	14 th Aug	21 st Aug	4 th Sep	5 th Aug	31 st Jul	25 th Aug	17 th Aug	12 th Sep	20 th Aug	17 th Sep	25 th Aug
White-throat	16 th Apr	15 th Apr	11 th Apr	15 th Apr	7 th Apr	10 th Apr	13 th Apr	12 th Apr	12 th Apr	11 th Apr	14 th Apr	4 th Apr	12 th Apr
	30 th Aug	24 th Sep	19 th Sep	6 th Sep	29 th Aug	16 th Sep	26 th Sep	14 th Sep	6 th Sep	3 rd Sep	16 th Sep	2 nd Oct	14 th Sep
Lesser White-throat	2 nd May	21 st Apr	18 th Apr	22 nd Apr	23 rd Apr	23 rd Apr	16 th Apr	19 th Apr	19 th Apr	23 rd Apr	29 th Apr	15 th Apr	22 nd Apr
	25 th Aug	NR	9 th Sep	27 th Sep	7 th July	14 th Sep	2 nd Sep	10 th Sep	5 th Sep	ND	22 nd Sep	27 th Sep	7 th Sep
Willow Warbler	12 th Apr	15 th Apr	5 th Apr	10 th Apr	3 rd Apr	2 nd Apr	1 st Apr	9 th Apr	20 th Mar	30 th Mar	8 th Apr	20 th Mar	3 rd Apr
	3 rd Sep	28 th Aug	4 th Oct	26 th Sep	24 th Sep	23 rd Sep	12 th Sep	1 st Oct	29 th Sep	11 th Sep	7 th Sep	4 th Oct	21 st Sep
Chiffchaff	12 th Mar	28 th Mar	4 th Mar	13 th Mar	4 th Mar	4 th Mar	14 th Mar	8 th Mar	2 nd Mar	3 rd Mar	2 nd Mar	2 nd Mar	13 th Mar
	30 th Oct	19 th Oct	20 th Oct	25 th Oct	2 nd Nov	3 rd Nov	3 rd Nov	27 th Oct	1 st Nov	22 nd Oct	31 st Oct	3 rd Nov	23 rd Oct
Spotted Flycat ^{r(1)}	5 th Sep	17 th Sep	10 th Sep	2 nd Sep	5 th Sep	12 th Sep	21 st Sep	25 th Sep	1 st Sep	6 th Sep	9 th Sep	25 th Sep	9 th Sep

(1) Spring arrival dates are not provided for this species as no spring passage is usually apparent.

Appendix 1B. Summary of spring departure dates and autumn arrival dates for regular winter visitors at Tyttenhanger GP for the period 2004-2021. The latest spring (L) and earliest autumn (E) dates recorded on site are shown in the column labelled L/E – these dates and the corresponding dates in the body of the table (if present) are shaded green and blue respectively; where E/L date is from prior to 2010 it is shaded in yellow. Median dates are shown for the period 2004-19. Where no dates (ND) are available these are indicated by the grey shaded boxes.

Species	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	L/E	Median
Water Rail	8 th Apr	NA	16 th Mar	12 th Feb	18 th Mar	22 nd Mar	13 th Apr	14 th Apr	7 th Apr	20 th Mar	19 th Apr	21 st Apr	22 nd Mar
	27 th Oct	11 th Dec	26 th Nov	22 nd Nov	3 rd Oct	14 th Sep	24 th Aug	2 nd Sep	20 th Sep	3 rd Sep	10 Sep	24 th Aug	30 th Oct
Golden Plover	9 th Apr	12 th May	23 rd Mar	2 nd Feb	NA	31 st Mar	NA	19 th Apr	15 th Mar	2 nd Apr	2 nd Mar	12 th May	30 th Mar
	26 th Oct	11 th Oct	28 th Nov	3 rd Oct	14 th Nov	18 th Nov	16 th Sep	30 th Sep	NA	NA	NA	16 th Sep	10 th Oct
Green Sandpiper	20 th Apr	20 th Apr	22 nd Apr	14 th Apr	13 th Apr	12 th Apr	20 th April	22 nd Apr	16 th Apr	25 th Apr	NA	4 th May	20 th Apr
	4 th Jul	18 th Jun	13 th Jun	15 th Aug	2 nd Jul	19 th Jun	9 th Jun	19 th Jun	6 th Jul	15 th Aug	22 nd Jun	8 th Jun	19 th Jun
Fieldfare	9 th Apr	12 th May	31 st Mar	30 th Mar	12 th Apr	16 th Mar	7 th Apr	22 nd Apr	9 th Apr	22 nd Mar	1 st Apr	12 th May	7 th Apr
	27 th Oct	15 th Oct	1 st Nov	7 th Nov	19 th Oct	15 th Oct	22 nd Oct	21 st Oct	9 th Oct	5 th Nov	19 th Oct	18 th Sep	21 st Oct
Redwing	10 th Mar	13 th Apr	23 rd Mar	21 st Mar	3 rd Apr	15 th Mar	3 rd Apr	22 nd Apr	3 rd Apr	30 th Mar	14 th Apr	14 th Apr	30 th Mar
	14 th Oct	7 th Oct	16 th Oct	16 th Oct	12 th Oct	8 th Oct	12 th Oct	1 st Oct	27 th Sep	8 th Oct	8 th Oct	7 th Oct	12 th Oct
Siskin	3 rd Mar	27 th Mar	NA	17 th Jan	8 th Apr	25 th Mar	21 st Apr	28 th Mar	15 th Mar	25 th Apr	25 th Mar	21 st Apr	25 th Mar
	14 th Oct	2 nd Nov	NA	18 th Sep	25 th Nov	26 th Sep	29 th Sep	15 th Oct	6 th Sep	8 th Oct	19 th Oct	14 th Sep	14 th Oct
Lesser Redpoll	18 th Mar	23 rd Apr	16 th Mar	NA	30 th Apr	1 st Apr	4 th May	15 th Apr	23 rd Jan	18 th Apr	5 th Mar	4 th May	22 nd Mar
	19 th Oct	19 th Oct	8 th Nov	2 nd Oct	29 th Oct	9 th Oct	20 th Oct	28 th Oct	13 th Sep	27 th Oct	19 th Oct	13 th Sep	19 th Oct

Appendix 2

Breeding Birds of Tyttenhanger – 2022

Blue Tit	Greylag Goose (domestic)	Mallard	Reed Warbler
Canada Goose	Grey Wagtail	Moorhen	Robin
Coot	Kingfisher	Mute Swan	Tufted Duck
Great Crested Grebe	Little Grebe	Oystercatcher	Whitethroat
Green Woodpecker	Long-tailed Tit	Pied Wagtail	Yellow Wagtail
Grey Heron	Magpie	Pochard	

Species shown in the above table were confirmed breeding species as defined by the current Bird Atlas categories (see page 11 – *Breeding Records* for further discussion).

	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total*
Records - Confirmed Breeding	1	14	17	17	14	19	9	0	1	92
Breeding species recorded	1	7	6	10	8	10	8	0	1	23

APPENDIX 3

SPECIES YEAR-LISTS FOR TYTTENHANGER GRAVEL PITS 2004-22120

The following is a list of species that have occurred at Tyttenhanger Gravel Pits and for which we have located records. The year lists and totals have been revised in accordance with the records accepted by the Hertfordshire Rare Bird Committee for the years up until 2020. Species shaded in yellow have not been seen in the period 2004-22 and records shaded in blue are first records for the site. Note, in the case of some species (e.g. Whooper Swan, Barnacle Goose) the first record is taken as the first recorded year after the species was admitted to the relevant category of the British List. The list also shows the first year (First Rec'd/First) for which we are able to find records for each species. Most of these dates were originally drawn from the Hertfordshire Bird Report however, recent addition of many records in the period before 2004 to the Tyttenhanger GPs dB has led to many of these dates being revised in this report. If anybody has earlier records for any of the species listed then please contact the editors. The column "Sig. count" (or Sig.) indicates the number of birds that constitute a statistically significant count; "All" indicates that all counts of this species are notable and/or that there are insufficient records to determine a value for this parameter.

Species	First Rec	Sig. count	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Mute Swan	1987	≥17	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bewick's Swan	1985	All	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Whooper Swan	2001	All	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
White-fronted Goose	1993	All	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Bean Goose	2011	All	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Greylag Goose	1986	≥27	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Canada Goose	1984	≥175	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Barnacle Goose	2006	All	1	0	1	1	1	0	1	1	0	0	1	1	1	1	1	1	0	0	1
Brent Goose	1996	All	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1
Egyptian Goose	1990	All	1	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1
Shelduck	1986	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1
Mandarin Duck	1988	All	1	0	1	0	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1
Wigeon	1983	≥11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Gadwall	1985	≥40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Teal	1983	≥39	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mallard	1983	≥84	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pintail	1985	All	1	1	1	1	0	1	1	1	1	0	1	1	1	0	1	0	0	0	0
Garganey	1986	All	0	0	1	0	1	0	0	1	0	0	0	0	1	1	0	1	0	0	1
Shoveler	1983	≥30	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Red-crested Pochard	1988	≥All	1	0	0	0	0	1	1	1	0	0	0	0	1	1	1	1	1	1	0
Pochard	1983	≥13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tufted Duck	1982	≥37	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Scaup	2007	All	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Lesser Scaup	1996	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Common Scoter	2000	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0

Species	First	Sig.	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Goldeneye	1983	All	1	1	1	0	1	1	1	1	1	1	0	1	1	0	1	1	1	0	0
Smew	1997	All	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
Goosander	1988	All	0	1	1	1	1	1	1	1	1	0	1	0	1	1	1	1	1	0	0
Red-b'd Merganser	2018	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0
Ruddy Duck	1989	All	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0
Red-legged Partridge	1971	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grey Partridge	1971	All	0	1	1	1	1	1	1	1	0	1	0	0	1	0	1	0	1	0	0
Pheasant	1983	≥15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Little Grebe	1982	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Great Crested Grebe	1983	≥21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Black-necked Grebe	2002	All	0	0	0	0	0	0	1	0	0	1	1	0	1	0	0	0	1	1	0
Cormorant	1988	≥39	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Shag	1988	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Spoonbill	2018	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Bittern	1996	All	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0
Great White Egret	2013	All	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	1	1	1
Little Egret	1999	≥7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cattle Egret	2019	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Grey Heron	1983	≥11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Black Stork	1990	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
White Stork	2006	All	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Glossy Ibis	2009	All	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0
Honey-Buzzard	1987	All	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Red Kite	2002	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Montague's Harrier	2011	All	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Marsh-Harrier	1991	All	1	0	0	1	0	1	1	1	0	0	0	1	1	0	1	1	1	1	1
Hen Harrier	2018	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Goshawk	1996	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sparrowhawk	1985	≥2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Buzzard	1991	≥5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Osprey	1988	All	0	1	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	1	1
Kestrel	1971	≥2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Merlin	1993	All	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Hobby	1983	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Species	First	Sig	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Peregrine Falcon	1994	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Water Rail	1994	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Moorhen	1988	≥20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Coot	1987	≥100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Common Crane	2019	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0
Oystercatcher	1985	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Avocet	1988	All	1	1	0	0	1	1	0	1	1	0	1	1	0	1	0	0	0	0	0
Stone Curlew	2002	All	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Little Ringed Plover	1971	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
Ringed Plover	1983	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
Golden Plover	1983	≥210	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grey Plover	1987	All	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Lapwing	1971	≥300	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Knot	1986	All	1	0	1	1	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0
Sanderling	1986	All	1	1	1	0	1	1	1	0	0	1	1	1	0	1	1	0	0	0	0
Little Stint	1987	All	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Temminck's Stint	1988	All	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0
Curlew Sandpiper	1987	All	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
Dunlin	1983	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
Ruff	1984	All	0	1	1	1	1	0	1	1	1	1	0	1	0	1	1	0	0	0	0
Jack Snipe	1982	All	1	1	1	1	1	1	0	1	0	1	0	0	1	0	1	0	0	0	0
Snipe	1982	≥15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Woodcock	1995	All	0	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Black-tailed Godwit	1987	All	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0
Bar-tailed Godwit	1987	All	1	0	1	0	0	0	0	1	1	0	1	0	0	1	1	0	0	0	1
Whimbrel	1986	All	1	0	1	1	1	1	1	1	1	0	0	0	0	1	1	0	0	0	1
Curlew	1986	All	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	0	1	1
Spotted Redshank	1985	All	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0
Redshank	1982	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Greenshank	1983	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Green Sandpiper	1982	≥5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wood Sandpiper	1985	All	0	0	0	1	0	1	0	0	0	0	1	1	1	0	1	0	1	0	0
Common Sandpiper	1983	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Turnstone	1991	All	1	1	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0

Species	First	Sig	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Mediterranean Gull	2001	All	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	0
Little Gull	1987	All	0	0	0	0	1	0	0	0	1	1	0	0	1	1	0	0	0	0	0
Black-headed Gull	1984	≥400	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Common Gull	1996	≥75	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lesser Black-b'd Gull	1982	≥40	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yellow-legged Gull	1996	All	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1
Caspian Gull	2006	All	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1
Herring Gull	1984	≥21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Iceland Gull	1998	All	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Great Black-b'd Gull	1982	≥2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Kittiwake	1993	All	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	0
Little Tern	1988	All	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0
Black Tern	1987	All	1	1	0	0	1	1	0	1	1	0	0	1	0	1	0	1	0	0	0
White-w'd Black Tern	2017	All	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Sandwich Tern	1996	All	1	0	0	0	0	0	1	1	1	0	0	1	0	0	1	0	0	0	0
Common Tern	1984	≥13	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Arctic Tern	1991	All	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1
Feral Pigeon	1993	≥100	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Stock Dove	1983	≥14	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Woodpigeon	1987	≥278	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Collared-Dove	1983	≥8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Turtle-Dove	1985	All	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Ring-necked Parakeet	1993	≥59	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
Cuckoo	1983	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Barn Owl	1997	All	0	0	1	0	1	0	0	0	1	1	0	1	1	1	1	1	1	1	1
Little Owl	1988	≥2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tawny Owl	1985	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Long-eared Owl	1993	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Short-eared Owl	1988	All	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0
Swift	1988	≥50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Kingfisher	1983	≥2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hoopoe	2013	All	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Green Woodpecker	1983	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Great Spotted Wood'r	1983	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Species	First	Sig.	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Lesser Sp'd Wood'r	1958	All	1	1	1	1	0	1	1	1	1	1	0	0	0	0	1	0	1	1	0
Wryneck	2010	All	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Short-toed Lark	1991	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Skylark	1984	≥25	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Sand Martin	1983	≥50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Swallow	1983	≥50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
House Martin	1988	≥60	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tree Pipit	1988	All	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0
Meadow Pipit	1983	≥42	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rock Pipit	1992	All	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	1	0	0
Water Pipit	1992	All	1	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Yellow Wagtail	1971	≥8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Grey Wagtail	1983	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pied Wagtail	1983	≥12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Waxwing	2010	All	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	0	0	0
Wren	1988	≥8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dunnock	1988	≥8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Robin	1988	≥10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nightingale	1998	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Black Redstart	1988	All	1	0	0	0	1	0	1	1	0	0	0	0	1	1	0	0	0	0	0
Redstart	1989	All	0	0	1	1	1	1	1	0	1	1	1	0	1	1	1	0	0	1	0
Whinchat	1988	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1
Stonechat	1986	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Wheatear	1982	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ring Ouzel	1987	All	0	0	0	1	1	0	1	0	1	0	0	0	1	0	0	0	0	0	0
Blackbird	1988	≥11	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Fieldfare	1983	≥120	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Song Thrush	1993	≥5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Redwing	1983	≥94	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mistle Thrush	1983	≥12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Cetti's Warbler	2018	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	1
Grasshopper Warbler	1985	All	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Sedge Warbler	1985	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Reed Warbler	1989	≥8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Blackcap	1983	≥8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Species	First	Sig	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Garden Warbler	1990	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lesser Whitethroat	1985	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Whitethroat	1988	≥12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Dartford Warbler	2006	All	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wood Warbler	1994	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chiffchaff	1983	≥8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Willow Warbler	1985	≥5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Yellow-b'd Warbler	2019	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Goldcrest	1988	≥5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Firecrest	1987	All	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	0
Spotted Flycatcher	1989	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Pied Flycatcher	1998	All	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	1	1
Penduline Tit	2018	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Long-tailed Tit	1988	≥19	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Bearded Tit	2022	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Blue Tit	1988	≥20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Great Tit	1988	≥18	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Coal Tit	1989	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Willow Tit	1988	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Marsh Tit	1990	All	1	1	1	1	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0
Nuthatch	1983	≥3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1
Treecreeper	1988	≥2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Red-backed Shrike	1996	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jay	1988	≥5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Magpie	1988	≥20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Jackdaw	1993	≥113	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Rook	1988	≥37	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Carrion Crow	1988	≥50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Raven	2009	All	0	0	0	0	0	1	0	1	0	1	1	1	1	1	1	1	1	1	1
Starling	1988	≥200	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
House Sparrow	1993	≥12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tree Sparrow	1982	All	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Chaffinch	1983	≥32	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Brambling	1991	All	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	1	1	1	1
Greenfinch	1983	≥15	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Species	First	Sig	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Goldfinch	1982	≥26	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Siskin	1983	≥50	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Linnet	1982	≥80	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lesser Redpoll	1993	≥20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Mealy Redpoll	1998	All	0	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0
Crossbill	1991	All	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Bullfinch	1983	≥4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Hawfinch	1983	All	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	1	1	0	0
Snow Bunting	1988	All	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Yellowhammer	1982	≥20	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Reed Bunting	1983	≥7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Corn Bunting	1983	All	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
TOTAL			137	136	142	132	137	135	139	140	138	133	132	129	139	144	144	133	132	126	128

