
Tyttenhanger Gravel Pits Bird Report for 2013

10th Anniversary Edition



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Introduction

This report is the tenth consecutive report we have produced for the site known locally as Tyttenhanger Gravel Pits. The first report for the site was produced in 1996 (Brew, 1997) as a response to the Herts Bird Club's Year-List Challenge that year. Likewise, after the Hertfordshire Year-List Challenge of 2004 some of us rose to the challenge of producing a report for that year (Christian *et al.*, 2006) and the rest is, history. Since 2004 a small (but dedicated) group has managed to produce a report every year. The format has generally followed that of the 1996 and 2004 reports and we hope that maintaining a similar layout and content allows comparisons to be more readily made across years. However, this year we are changing things a little!

The core of this, and previous, reports is the systematic list of bird observations for the year. However, as this is our 10th anniversary we have decided to provide summaries for all species that have been recorded at Tyttenhanger since 1983. This date was originally chosen as it appears to be around the time the area became readily accessible - and it is also the earliest date that records appear in the Hertfordshire bird report as Tyttenhanger Gravel Pits. As we have detailed data for the last 10 years, we will also be concentrating on these data and providing summaries and analyses where appropriate. As 10 years is the upper limit for effectively presenting much of the summary data, we have also begun the transition to some new, and hopefully useful and informative, ways of summarising the data - an outline and explanation of which can be found in more detail in the section "Data Collection, Analysis and Presentation". 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. The latter includes ornithological highlights along with summaries of physical and structural changes and outstanding meteorological events.

As in previous years we hope you enjoy reading this report and if you do, then we encourage you to let us know either *via* the email addresses below or through the Hertsbirding Yahoo! Group (see: <http://groups.yahoo.com/group/hertsbirding/>). Likewise, if you did not enjoy reading it, or can think of ways of improving your enjoyment, then please let us know.

Finally, this report is, in many ways, a transition to a new way of summarising what is becoming an increasingly large body of data on the birds of Tyttenhanger. As always, we leave you with the hope that you are encouraged to venture on-site and to submit your records through the available channels for inclusion in what will hopefully be a long line of future reports.

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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 a number of 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. The car park next to the Bailiff's van and parking elsewhere around the fishing lakes is subject to a charge of £2.00 for those not holding fishing permits. The tickets can be obtained from the machine on the toilet block wall next to the "Lakeside Snackz". The access tracks that run each side of the fishing lakes are now gated, but not locked, and providing birders obtain a parking ticket, they can go through these gates and park sensibly anywhere along the tracks.

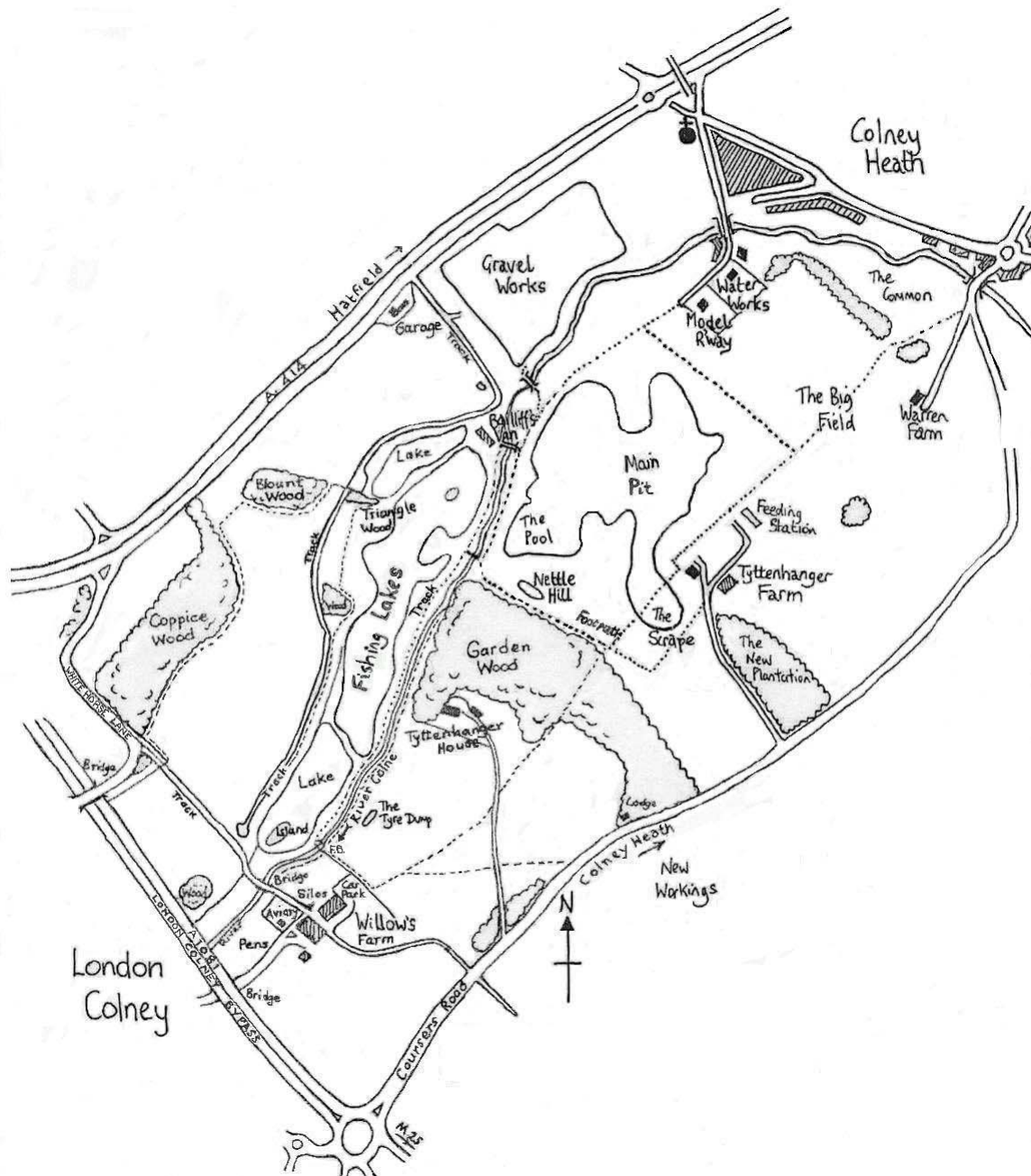


Figure 1. Map of the recording area covered in the current report. This map is a revised version of that shown in Brew (1997) and is the best representation of the situation in 2013. A previous version of the map with a superimposed grid is available in earlier reports. Scale approximately 1.5cm = 250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

Once on-site there is an extensive network of footpaths and tracks which cover the majority of the recording area. Observers are requested to keep to the marked footpaths to minimise disturbance to the birds, the land-owners 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 2013

Most of the main physical features on-site remained much the same as they were in 2012 with the sand-spit in the Main Pit continuing to be a major feature. The floods at the end of the year as witnessed by the photograph shown below, are probably one of the most memorable non-avian events of the year. Surprisingly, the rainfall for the year was very close to the average for the period 2001-2013 (see the table below)¹ while the number of days of frost was slightly above that average. Obviously the local conditions in December were what contributed to the Colne breaking its banks and flooding the gravel pits area and notably, this was the most extensive flooding that any of us can remember to as far back as 1993.

Another development in 2013 was the launch of a Tyttenhanger Twitter account. So, to find out the latest bird news (and other news) from Tyttenhanger go to @TyttGP.



	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2001-13 Average
Annual Rainfall (mm)	756.9	612.0	788.4	845.2	851.1	821.7	689.9	629.8	1004.0	805.7	805.1
Airfrost Durat'n (days)	38.1	51.0	43.5	34.3	43.7	49.9	80.1	29.0	46.6	55.6	45.2

Coverage of the site for the year came to a total of 271 days (74.25%)– with peak coverage being in the usual months of March/April and August/September. Coverage (days per month), median number of records for the month (2004-2013) and the proportion - as a % of total records from the period 2004-2013 - that fall in that month are all shown in the table below. It is worth noting that the total number of days of coverage over the last 10 years has been 2713 days an average of 271 days per year ... which makes 2013 spot on the average for the period 2004-13!

¹ The rainfall and airfrost duration are adapted from the Bureau of Meteorology (BoM) website as the previously used Icen site (from Royston) appears to have stopped producing summaries with data in a comparable format to previous years. The data from the BoM site are for the S & SE England region (covering London, the home counties and across to Somerset and the south coast from Dorset to Kent. There is a reasonable correlation between the annual data from Icen and BoM and so we feel the data are indicative of the prevailing local conditions at Tyttenhanger for the years in question.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2013	19	17	21	27	23	23	24	22	24	29	26	16
Median	22.5	19.5	25.0	27.5	23.5	21.0	25.5	26.5	23.5	22.5	20.5	18.0
%	7.70	7.45	9.29	10.10	8.63	7.30	9.29	9.77	8.18	8.04	7.45	6.82

Birding Highlights of 2013

January: saw birding get off to an average start on the 1st with a **Little Egret** (the first of 105 of this species recorded over the year). Birding got more exciting on the 4th when a **Lesser Spotted Woodpecker** was seen in the trees along the river Colne and an adult **Yellow-legged Gull**, with a possible second adult were seen on the Main Pit. Three **Egyptian Geese** appeared on the fishing lake on the 5th, one still remained on the 11th. A **Dunlin** on the 20th was the first migrant wader of 2013 and the month ended with a **Peregrine** on the 26th.

February saw a drake **Shelduck** on the 8th – which was the first of three sightings this month. The only other birds of note were a **Barn Owl** (9th) and **Peregrine** (12th). A flock of 120 **Fieldfare** (14th) was this month's highest count of this winter visitor.

March, as expected, the birding got more interesting and a **Tawny Owl** heard calling from Garden Wood on the 4th was a good start to the month. An **Oystercatcher** arrived on 7th – along with a **Redshank**, which was joined by another on the 18th. Probably the same **Shelduck** was seen again on the 11th and on another two dates this month. A second **Oystercatcher** on the 16th joined the one already on site and a summer plumaged **Black-necked Grebe** was a very welcome day visitor on 24th. Another irregular visitor on this day was a **Barn Owl** - also seen again two days later to make the third record for the year. Another "rare" at Tyttenhanger, was a 3rd winter **Great Black-backed Gull** on the Main Pit on the 25th. A **Stonechat** and a **Chiffchaff** on the 28th along with the first 2 **Wheatear** of the spring on the 30th were the first heralds of spring.

April is usually an exciting month and it did not disappoint again this year! It started slowly but began to improve as passing migrants and regular breeders started to arrive. A **Wheatear** was seen on the 4th, 4 **Redshank** on the 6th, 4 **Egyptian Geese**, **Green Sandpiper** and **Common Tern** on the 7th and then a second **Lesser Spotted Woodpecker** for the year was seen in Garden Wood on 9th. A lone **Black-tailed Godwit** was found resting on the Main Pit on the 10th and 2 **Raven** flew east over Tyttenhanger House on 13th with 5 **Sand Martin**, 2 **Swallow** and 2 **House Martin** completing the aerial display that day. The first **Blackcap** arrived on 14th and the following day migrants (**Willow Warbler**, **Whitethroat**, **Sedge Warbler** and a **Little Ringed Plover**) continued to arrive around the site along with the first of the year's new species - a **Hoopoe** found in the grass field north of the Main Pit. Although lost after the initial sighting, it was eventually re-found in the same area. A fall of more common migrants had occurred at the same time, with a report of up to 30 **Wheatear**, plus 3 **Yellow Wagtail** and a brief sighting of a **Common Redstart**. Several birders were lucky to witness this spectacle before every bird had gone, as fast as they had appeared! The quality continued on 16th with a visit from a **Little Gull** along with a **Common Sandpiper**, 2 **Yellow Wagtail** and 2 **Grey Partridge**. A **Curlew** also flew over on the 19th and an **Egyptian Goose** was on the fishing lake that day. A **Whinchat** was seen at Tyttenhanger Farm on the 19th and an **Osprey** made a low fly-past on 21st while and a female **Redstart** and **Lesser Whitethroat** were seen around Tyttenhanger farm on the same date. Birding returned to a more normal pattern for the rest of the month, with another **Tawny Owl** heard in Garden Wood on the 22nd along with the first **Garden Warbler** the following day; further arrivals were on 24th – **Cuckoo**, 27th - **Swift** and a second **Whinchat** for the year on the 28th.

As expected, things slowed slightly in **May** but migrants still continued to arrive/pass through and there is always the expectation that something exciting or unusual may be found in May. The 4th produced a **Shelduck**, and the first of 8 **Cuckoo** recorded this month. The first of the 35 **Hobby** recorded this year arrived on 8th, a **Dunlin** stayed for a day on the 10th and another **Osprey** heading north on 16th. A **Sanderling** was found on the Main Pit on the 20th and another 2 **Dunlin** were seen on 21st and on the 31st a lone **Oystercatcher** was observed exploring the area where they bred in the previous year.

June, and carrying on with the breeding theme, the 7th gave indications that a pair of **Yellow Wagtail** had bred near Tyttenhanger farm when an adult bird was seen carrying a faecal sac/food. This was subsequently confirmed on the 22nd when a young bird was seen being fed by 2 adults. This is the first breeding record since 2004 and a welcome return to the list of breeding birds. The rest of the month was predictably much quieter in terms of passage migrants and the only other records of interest, were a **Cuckoo** on the 16th, 2 **Shelduck** on the 20th and **Yellow-legged Gull** on the 23rd. A **Peregrine** was seen inflicting panic amongst the resident birds on the 29th to bring the month to a close.

July found the breeding season well under way as attention switched to trying to establish proven breeding. Nevertheless, there was still the odd visitor to arrive and create interest including, a **Hobby** on 1st and 3rd and a **Little Ringed Plover** on the 10th. But real quality arrived on the 20th in the form of a **Curlew Sandpiper**. Found on the Main Pit, news went out instantly and the bird obliged by staying all day giving many local birders a chance to connect with this rare visitor to Hertfordshire – which was just as well as it had gone the following day, perhaps scared off by a **Peregrine** that was in the area! Juvenile **Mediterranean Gulls** was sighted on 20th and 27th and the month concluded with the arrival of 2 **Dunlin** and another juvenile **Mediterranean Gull** on 30th.

August started with a **Hobby** on 5th – which was the first of several individuals reported this month. A **Dunlin** on the 6th was replaced by 3 **Greenshank** on the 9th and 10th. A **Wheatear** seen at Willows Farm on 13th was the first returning migrant, as was a **Whinchat** on the 14th; there was also an adult **Mediterranean Gull** on the 14th. Four **Turnstone** briefly rested on the Main Pit on 15th and a migrating juvenile **Cuckoo** on the 16th was the last sighting of this species for the year. Post breeding migrants continued to be reported during this month with 3 **Ruff** on the 18th, **Dunlin** on the 20th, 3 **Ruff** again – albeit briefly - on the 22nd, and then another 5 **Ruff** that stayed for 4 minutes only on the 25th! Two **Wigeon** on the 26th were the first “winter” wildfowl of the autumn and a **Pied Flycatcher** was seen in Garden Wood by two lucky observers on the 27th. The month concluded with a **Whinchat** on the 27th, **Peregrine**, **Wheatear**, **Yellow Wagtail** and 2w **Mediterranean Gull** on the 28th and another **Whinchat** on the 31st.

September made a slow start with a single **Dunlin** on site for the first half of the month and **Hobby** seen on most days. A **Wheatear** on the 6th was followed by another 2 **Ruff**, a **Peregrine**, and a **Lanner** type falcon (probably an escape from Willows Farm falconry) all present on the 11th. Two **Ring-necked Parakeet** made a rare and noisy flyover at Willows Farm on the 13th and a much sought after **Spotted Flycatcher** finally made an appearance in Garden Wood on the 14th - perhaps the same bird that was seen again in the same area on the 17th. Another **Wheatear** passed through on the 18th and then three records of a juvenile/1st winter **Mediterranean Gull** providing the highlights on three separate days at the end of this month.

A **Common Sandpiper** appeared on the 2nd **October** and was followed by another 1st winter **Mediterranean Gull** on the 4th. Then on the 5th, another first for Tyttenhanger when, with some of the regulars on their way to the Scilly Isles, Steve Pearce had the great fortune to discover a **Great White Egret**! He initially only got a fleeting view of it as it flew past him, but luckily it settled in the “Scrape” area of the Main Pit! And that’s where it stayed till at least the 15th with many local (and not so local) birders managing very close up views of the bird as it fed happily in the shallows- not at all phased by the attention it was receiving. During the Egret’s stay, other birds of note were the last **Swallows** of the year (4 on 6th) and the first 2 **Redwing** of the autumn on the 7th. Other autumn goodies, were, 2 **Golden Plover**, 3 **Snipe**, and a **Great Black-backed Gull** on the 11th and then 2 **Raven** flying NE on the 12th, and c30 **Fieldfare** passing over on the 15th. The **Great White Egret**, (now known to be doing the rounds of Hertfordshire at the time), reappeared on the 30th and finally, on the 31st, 11 **Lesser Redpoll** were found feeding among the cars in a very busy car park at Willows Farm.

November began as October ended, with another rarity found by one lucky observer! On the 3rd a **Glossy Ibis** was seen briefly in the Scrape area before flying off towards the M25. The quality continued on the 10th when 2 waders landed on the main pit, staying just long enough (8mins) to be positively identified as **Spotted Redshank**! A female **Goldeneye** was a one day visitor on the 11th and a **Curlew** flew over on the 18th. Events slowed from now until the end of the month, with just the usual winter species being recorded, dominated by several sightings of **Golden Plover** flocks.

December saw the winter theme continue on the 7th when a **Woodcock** was flushed in Garden Wood and 3+ **Jack Snipe** were seen feeding on the Scrape area between the 9th and 14th, with a **Water Rail** present in the same area between the 14th and the 24th. The year concluded with another **Raven** seen over the water pumping station on the 30th.

In summary, Tyttenhanger produced a total of 133 species in 2013 – the second lowest year total in the period 2004-2013 after 2007 (132). Despite the low total, there were two new species for the site this year with **Hoopoe** and **Great White Egret** becoming the 199th and 200th species respectively along with another 10 species seen this year but not in 2012 i.e. **Grey Partridge**, **Black-necked Grebe**, **Glossy Ibis**, **Sanderling**, **Curlew Sandpiper** (the first since 1997), **Jack Snipe**, **Spotted Redshank**, **Turnstone**, **Pied Flycatcher** and **Raven**. Conversely, there were 17 species seen in 2012 that were not recorded this year: **Bewick’s Swan**, **Mandarin**, **Pintail**, **Smew**, **Goosander**, **Ruddy Duck**, **White Stork**, **Merlin**, **Avocet**, **Knot**, **Bar-tailed Godwit**, **Whimbrel**, **Kittiwake**, **Black Tern**, **Sandwich Tern**, **Water Pipit**, **Ring Ouzel**.

Taxonomy and Nomenclature

As with previous reports the systematic order that we have followed is close to that of the British Ornithologists Union (BOU) and this, and the nomenclature for common names follows, that used in the Hertfordshire Bird Report.

Submission of Records

Observers are encouraged to submit their records for the site (and for Hertfordshire generally) via the Herts Bird Club website (<http://www.hertsbirdclub.org.uk/>) and to report sightings of interest through the Hertsbirding Yahoo! Email Group. Such reporting will ensure that records are passed to the County Recorder and disseminated quickly to the local birding community. It should also be mentioned that records that are submitted to the BTO’s Birdtrack system also flow through to the County Recorder and so are also captured for this report.

Data Collection, Analysis and Presentation

Data Collection

This report is the 6th year in which we have had access to all of the records from both the Herts Bird Club database and Birdtrack. As shown in the Table below the numbers of observers was fairly similar to 2012 – but the number of records has risen again to around 7,000 – which is close to the median for the last six years of 7,096.

	2008	2009	2010	2011	2012	2013
Number of Records	11,415	9,498	6,968	7,105	5,548	7,087
Number of Recorders	57	49	76	72	58	60

For much of the data prior to 2004 that is cited in this report we have used the Hertfordshire Bird Reports from the period 1983-2003 as the primary source of data. These data have come from the main body of the text of those reports and also from the WeBs counts that are included in them. It is worth noting that the WeBs records between 1987 and 1997 were supplemented by additional counts from the same month if they were greater than those made during the WeBs survey. We have made use of these data where available.

Analysis

As the data made available to us comes from different sources there is a certain amount of duplication amongst them. 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. Depending on the species, calculation of parameters such as number of records, 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 records that have been generated for a particular species. When this is done records 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 HBC website and Birdtrack) and records ascribed to discrete observers are retained. We refer to this statistic as the Total Record Number.

As this is our tenth year of producing a report we have decided to trial a number of slightly different ways of presenting data in this report along with a summary of records for all species recorded during the period 2004-2013. For much of the data prior to 2004 and back to 1983 we have relied heavily upon data that is in the Hertfordshire Bird Reports. This earlier date appears, as far as we can deduce, to coincide reasonably well with the time at which many of the working at the gravel pits were flooded and when access became a little less restricted². Extracting this data has been a major effort on the part of one of the editors over the last several years and the preparation of a significant amount of this report would not have been possible without those data. So, a big thank you to Ricky Flesher for those long winter nights spent huddled over old copies of the Hertfordshire Bird Report! Also during the writing of the current report the Birds of Hertfordshire (Smith *et al.*, 2015) was published and another potential source of data became available. We have attempted to integrate data from this publication into our current analysis – where appropriate – to provide a broader local context for our summary of available Tyttenhanger records. Likewise, we have also made limited reference to the “The breeding birds of Hertfordshire” (Smith *et al.*, 1993) where appropriate.

We should also mention at this point that as part of the above revisions we have also extracted records from the WeBs count tables in the Hertfordshire Bird Reports from 1987 onwards and have put these into a digital format. We have used these data to update the monthly maxima for a number of species (see the section “Corrections and Addenda to the 2012 Report”),

Finally, as we have indicated above, there are errors in the extracted data and analyses that have been carried out over the last 10 years and in many instances these errors have occurred when we have undertaken new analyse i.e. when we see a significant change in the status of a species - as with Red Kite, Ringed Plover and Greylag Goose in the recent past. As part of our 10th Anniversary efforts, and the realisation that this report is an on-going concern (that we never thought would continue for as long as it has) we have resolved to bring the data capture and formatting from the period 2004-07 more in line with the data from 2008 onwards. This is a long-term project that we hope to complete over the next couple of years but which will eventually make all of the data from 2004 onwards more amenable to new and different analyses in the future.

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:

Daily maximum Count – the maximum count for a particular species on any given day.

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.

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

² We have ready access to the Hertfordshire Bird Reports back as far as 1980 and Tyttenhanger is not specifically mentioned in those reports until 1983. We have therefore focussed on this date in much of our discussion – although strictly speaking the first records that are noted for particular species are more accurately described as the first record after 1979.

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 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 that are generated from the Daily Maximum Count, we also occasionally calculate the following parameters – Records and Total Record Number.

Records – this is a term that 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 was probably continuously present on-site or frequently using the 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 that they were present.

Total Record Number – this is occasionally calculated for a given species/month etc and is generated from all individual records for that species after the removal of obvious duplicates. While it is an overestimate of the number of birds present, it may offer insights into the way that certain species may or may not be recorded.

Finally, 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” 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:

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 we do occasionally use it.

Median - when the number of data points is small (and 10 years is still a small amount of data!), the median is an alternative measure to the mean (or average) to indicate a measure of the central tendency 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.

Presentation

One of the features that you may notice is different from last year is in the systematic section of the report where the scientific name of each species is followed by two numbers. As the diagram shows below these numbers are in the order of the “Number of years the species has occurred in the last 10 years” and the “Maximum count on-site” for that species.

Number of years recorded in the last 10

Mute Swan *Cygnus olor* (10; 54)

Maximum count on-site

In addition, below the header for each species are the current on-site status summaries. As this is the first time we have reviewed much of the available data we have also tried to standardise the wording that we have used in these status summaries to make them more comparable. The following is a guideline to how several generalised terms have been applied in these descriptions:

Rare visitor – has occurred on less than three occasions

Infrequent visitor – has occurred on three to ten occasions

Irregular visitor – has occurred on 10-20 occasions

Frequent visitor - has occurred on more than 20 occasions – but is not expected to occur in the majority of years

Regular visitor - occurs in most years.

Finally, a comment about breeding species. A number of species undoubtedly breed, or attempt to breed on-site, each year - although in most cases there is no data that indicates 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 only tended to use the latter term. Towards this end the following criteria are used to designate “confirmed breeding:”

- Adult seen carrying food and/or faecal sac to/from a nest
- Young birds in the nest
- Adults and newly fledged birds seen together.

In the latter case, the possibility usually exists that these birds may have bred either on-site or just off-site and so this caveat is usually applied to these observations where appropriate.

Corrections and Addendum to the 2012 Report

No updates have been obtained from the Hertfordshire Bird Report for 2012. During the preparation of the following report a large amount of the data that we have collected and analysed over the last 10 years was revisited. Much of the earlier data, especially from before 2008, were not available in the same format as more recent data and at some point in the past would have been extracted from spreadsheets and notebooks to perform the analysis required at the time. One of the problems of extracting data in this way was that in many cases the data were not re-coded and saved in the format that we have subsequently come to rely upon. For this reason there are a number of errors and inconsistencies that have crept into some of the analyses presented over the last 10 years. While the majority of these errors are relatively small and make no difference to the overall trends and patterns in the data, there are a few of the analyses that have errors that we consider significant enough to make note of here; these are listed below.

The following errors were noted in the 2012 report:

- Red Kite: the number of records shown in the table on page 15 should have read 78 for 2011 not 106. An updated version of this table can be found on page 22.
- The species total for 2004 in Appendix 1 should have been 137 – not the 138 shown (it incorrectly indicated Stone Curlew was recorded in 2004).

In addition, as a result of our on-going attempts to capture and digitise as many of the site records as possible we have added and amended records for a large number of species. Listed below are those species for which analysis in some of the previous reports may have been inaccurate due to gaps in the data and lack of data at the time of producing the reports. Those species listed are those for which we feel the differences are substantial enough to warrant mention.

- Digitisation of data from the WeBs tables in the Hertfordshire Bird Reports from 1987 onwards has meant that some monthly maxima for the following species have been amended: Mute Swan, Canada Goose, Pochard, and Shoveler.
- Digitization of other data has resulted in some statistics for the following species being updated: Shelduck, Ruddy Duck and Oystercatcher.

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 who made the Tyttenhanger records from the Herts Bird Club database and Birdtrack available to us – 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). The cover picture and other graphic images in this report were produced by Peter Christian; photographs are individually acknowledged.

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The above is a list of all of those people who contributed records either directly or through the Herts Bird Club. Where records have been credited to specific observers these are shown in the text. Apologies if you submitted records for 2013 and your name doesn't appear on the above list - but please let us know so that we can make sure it doesn't happen in the future.

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SYSTEMATIC LIST

Mute Swan *Cygnus olor* (10; 56)

Resident through much of the year and breeds on site in small numbers (1-2 pairs); first recorded breeding in 1996.

2013: Two pairs bred this year with occupied nests reported in April and May. The first reported brood of the year was of 4 cygnets on the 6th June with this brood decreasing to 3 on 15th and 2 by the 23rd of the same month. The second brood of 4 cygnets was first seen on the 24th June and had decreased to only 2 young in July. The maximum counts for the year was of 15 birds on the 24th and 26th January. Overall, this was a fairly normal year for this species with monthly maxima as shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2013	15	3	5	6	6	8*	6	8	11	5	6	2
Median 2004-13	12	7	6	5	8	9	9	9	11	13	11	11
Maximum 2004-13	18	23	9	11	18*	12	12*	14*	20*	24	28	26
Minimum 2004-13	4	3	4	3	5	6	3	6	5	5	6	2

* Includes young birds

Summary: First noted at Tyttenhanger in the WeBs data included in the Hertfordshire Bird Report of 1987, this is a breeding resident that has bred in each of the last 10 years and is generally present all year around – with slightly increased numbers in the winter months. The largest on-site count was of 56 birds in December 2003 with the maximum count in the last 10 years was of 28 birds on 21st November 2005. Interestingly, the monthly maxima from the WeBs/HBR data were generally higher in the period 1997-2003 than in the period 2004-13 – although data from the former period are not available to investigate this observation further

Whooper Swan *Cygnus cygnus* (3; 4)

Infrequent visitor. Some records probably relate to feral birds from the Luton area but some may relate to wild birds.

2013: Not Recorded.

Summary: Recorded in three consecutive years between 2004 and 2006 - but not since. The best count was of 4 birds on the 9th October 2004. Prior to 2004 there was just one record of a single bird on 25th November 2001.

Bewick's Swan *Cygnus columbianus* (2; 9)

Infrequent visitor.

2013: Not Recorded.

Summary: Five records in total for this species with three of those back in the 1980s i.e. 1 on 5th January 1985, 5 on 28th February 1988 and 9 (including 2 adults) on 20th November 1988. The last 10 years has seen a further 2 records with a single bird staying between 15th and 25th March 2008 and then 4 birds seen on 8th December 2012.

Bean Goose (Tundra) *Anser fabalis rossicus* (1; 1)*Rare visitor.***2013:** Not Recorded.

Summary: The only record is of a single bird that arrived on the 26th November 2011 and stayed until the 1st December. This was only the 4th record for this species (all of *A. f. rossicus*) in the county since 1983.

WeBs-Counts and the Hertfordshire Bird Reports

The Wetland Bird Survey (WeBs) counts for a number of species (see below) are regularly summarised in the Hertfordshire Bird Report. WeBs counts are organised on a national basis by the Wildfowl & Wetlands Trust and take place on the middle week-end of each month. In addition to the WeBs data, in the years between 1986 and 1997 the Hertfordshire Bird Reports also included monthly maxima in the WeBs-count tables with the note “where a significantly higher count was noted on another day in the month this is shown in brackets”. Up until 1993 WeBs counts were not made in the summer months (April-August) for most species, and so data are usually only available for period January-March and September-December (inclusive). For the current report we have generally used the highest count available for years prior to 2004 – whatever the source – for comparisons with data from the last 10 years (2004-13). Where we have used the combined WeBs – Hertfordshire Bird Report data we have indicated this with the term “WeBs-HBR data”. However, the limitations outlined above should be borne in mind when reading the analysis based on these data – which may apply to the following species for which extensive WeBs/HBR data are available:

Mute Swan	Canada Goose	Wigeon	Gadwall	Teal
Mallard	Shoveler	Pochard	Tufted Duck	Goldeneye
Ruddy Duck	Little Grebe	Great Crested Grebe	Cormorant	Grey Heron
	Moorhen		Coot	

White-fronted Goose *Anser albifrons* (1; 3)*Infrequent visitor.***2013:** Not Recorded.

Summary: The first records for the site were from 1993 with 3 birds on 28th February and then 3 birds again on the 6th March. There was then a gap of over 18 years before the next record on the 16th November 2011 with a single bird seen the following day and then 2 birds (1 adult and 1 juvenile) on the 21st November that were reported for the rest of the month up until the 1st December.

Greylag Goose *Anser anser* (10; 30)*Birds of presumed feral origin appear most years.*

2013: Another good year for this species with 64 records (61 in 2012) and the first breeding record for the site when an occupied nest was reported on the farm lake island on 21st April and 4 young were seen on the 4th May. There were 28 records of 10 or more birds (20 in 2012) and the maximum count for the year was of 28 birds on the 9th September.

Summary: The first on-site record for this species is in the Hertfordshire Bird Report of 1986 – with 4 birds reported flying up-river on the 19th April. Records from then until 1999 were relatively thin on the ground, with a total of 19 further records providing a maximum count of 12 birds on 26th January 1997. There was then a gap of 5 years until 2004 when the next record becomes available. Whether the species didn't occur in this period or whether it became more common and therefore less notable is open to conjecture; but the fact that it went unreported in the Hertfordshire Bird Reports between 1988 and 1993 seems to suggest the latter. Since 2004 the species has become more common – as shown in the Table below – and it has been recorded in every year. What sparked the increase in records after 2007 is open to speculation – but it certainly was dramatic! The record count on-site is of 30 birds on 5th June 2012.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No Records	9	6	31	21	71	118	87	56	61	64
Maximum	5	2	8	6	23	26	20	17	30	28
Counts of 10 or more	0	0	0	0	11	50	36	7	20	28

Canada Goose *Branta Canadensis* (10; 400)*Common throughout the year with large moulting flocks present in the autumn. Usually breeds on site.*

2013: Numbers were much the same this year with the usual peaks in August and September. Four to five broods were reported this year in May and June with 24 young noted on 30th June. Monthly maxima for the year are shown in the summary below.

Summary: A breeding species that has bred in all of the last 10 years with generally around 4-5 broods producing variable numbers of young. The largest count identified in the period 1984-2013 is of 400 birds on 18th September 2005 – which is also the highest on-site count. Summary statistics for the last 10 years are shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2013	33	31	49	16	32	50	59	217	270	37	54	45
Median 2004-2013	66	47	41	16	40	40	62	191	216	92	59	49
Maximum 2004-2013	98	91	72	28	62	50	77	304	400	315	116	91
Minimum 2004-2013	19	16	15	9	18	15	28	125	118	37	40	37

* Includes young birds

Barnacle Goose *Branta leucopsis* (5; 12)

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

2013: Not recorded.

Summary: First recorded at Tyttenhanger in 1987, the feral population in Bedfordshire was recognised as being Category C on the British List in 2005³. Given the proximity of the Bedfordshire population it is perhaps surprising that there are only 26 records from the last 10 years – almost half of which were in 2010.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Records	2	0	3	1	7	0	11	2	0	0

Prior to 2004 there were 7 records in the Hertfordshire Bird Reports between 1987 and 1997 – with a maximum count of 2 birds that were present between the 30th November and 3rd December 1993. There was then a gap of 6 years before the species was recorded again in 2003. The maximum on-site count of 12 birds on the 13th July and 30th July 2006.

Brent Goose *Branta bernicla* (2; 48)

Infrequent visitor.

2013: Not recorded.

Summary: The first record was of a flock of 48+ birds on 7th April 1996 – which is still the largest count for the County – which was followed in 1997 by a bird present between 24th and 28th January. The next record is of 4 birds on 16th October 1997, and then single birds from 4th May to 21st May 2003, on 28th January 2006 and from 16th to 18th March 2010.

Egyptian Goose *Alopochen aegyptiacus* (8; 10)

Infrequent visitor

2013; Four records for the year is a relatively good year for this species with 3 on 5th January, 1 on 11th January, 4 on 7th April and the last record of the year was of a single bird on 19th April.

Summary: Admitted to Category C of the British List in 1971 the first bird appeared at Tyttenhanger in 1990 when it was treated as an escape in the Hertfordshire Bird Report; the next record was 3 years later in 1993 (3 on 14th November). The last record prior to 2004 was of 8 birds on the 26th August 1998 – although it is possible that this species was not reported in the intervening period because of uncertainty about its status. The last 10 years has produced a total of 84 days-recorded with a maximum count of 10 birds 1st October 2005. A yearly breakdown of days-recorded for the last 10 years is presented below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Days Recorded	1	2	0	5	12	18	41	0	1	4

Shelduck *Tadorna tadorna* (10; 12)

Regular visitor in small numbers. Has bred in the past and the presence of pairs during the breeding season indicates it may breed again either on-site or close by.

2013: A dramatic fall to only 9 days-recorded this year – down from 52 in 2012 – probably indicating that birds did not attempt to breed in the local area. Records were of single birds on 8th, 9th and 23rd February, 11th, 13th and 28th March, and on the 4th May. Finally, 2 birds were reported on the 2nd and 20th June bringing a dismal year for this species to a close.

Summary: The last 10 years has seen this species occur primarily between the months of February and May and although it has bred once in the last ten years (2007), it is also thought to have bred at Coursers Road gravel workings in subsequent years- and will hopefully breed again in the future as it consolidates its breeding in the county. Breeding aside, this species has clearly had peaks and troughs in the last 10 years as shown in the summary below and hopefully 2014 will see it bounce back to the heights of 2008 and 2009.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Days Recorded	60	27	9	54	74	86	93	50	52	9

³ <http://onlinelibrary.wiley.com/doi/10.1111/j.1474-919X.2005.00470.x/abstract;jsessionid=E3461C9D5C618E72ABBC0672A4F05196.f04t01>

Quantitative data prior to 2004 are relatively scarce with this species first noted at Tyttenhanger in the Hertfordshire Bird Report of 1986 and birds recorded in most years through to 2003. Notable records in the period from 1986 to 2003 include an Immature from 9th-18th August 1986 (first record), one bird present from 7th October until the 17th December 1989, breeding noted in 1994 with a pair and 10 young recorded (record count and first confirmed breeding record for the site), a pair present in the breeding season and up to 3 juveniles reported in August of 1996, and finally, one bird on the 8th January 2002.

Mandarin *Aix galericulata* (5; 3)

Irregular visitor.

2013: Not recorded.

Summary: This species was first recorded at Tyttenhanger in 1988 when a pair were seen on the 3rd May. Records until 2004 are relatively scarce with a male seen in March 1990, a single bird in late 1991 and 1-2 birds present through 1993. There was then a gap until 2002 when a tame pair - that shuttled backwards and forwards to Verulamium Park – was present throughout the year - with single males also present on the 17th March and 11th May of that year. Finally in 2003 a male and 2 females were seen on 19th September and a male on 12th October. Subsequently, the last 10 years has seen this species recorded on a further 12 days – somewhat unpredictably scattered across the years as shown in the table below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Days Recorded	4	0	1	0	5	1	0	0	1	0

Wigeon *Anas penelope* (10; 77)

Usually occurs through the winter months in small numbers with additional passage migrants in spring and autumn.

2013: A total of 42 records this year - all in the second winter period – was significantly more than 2012 (12 records) and 2011 (21 records). Numbers were also slightly up on last year with one count (10 on 30th September) being the first in double figures since 2010.

Summary: First recorded in the Hertfordshire Bird Report of 1983, this species is a reasonably frequent visitor that generally peaks in the late autumn/early winter months – as shown in the tables below. The largest count we have identified from the period 1983-2013 is of 77 birds in January 1997. The maximum count in the last 10 years was of 33 birds on the 4th December 2010.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2013	0	0	0	0	0	0	0	2	10	8	7	4
Median	5	2	2	0	0	0	0	0	6	5	3	6
No Years Recorded⁽¹⁾	8	7	7	2	2	2	1	4	10	10	10	10

⁽¹⁾ 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Records	23	24	26	28	41	36	42	21	12	42

Gadwall *Anas strepera* (10; 34)

Frequently recorded; breeding rarely proven.

2013: One pair bred on site this year with a single duckling reported on the 2nd July. This is fourth time that this species has bred in the last 10 years – the previous times being in 2004, 2005 and 2006. Birds were present throughout the year with a maximum count of 23 birds on the 31st December.

Summary: Generally present throughout the year with monthly maxima usually between 6-14 birds. The maximum count for the period 2004-2013 was of 34 birds on the rather strange date of 26th June 2011. However, this does coincide with a slight peak in numbers that is observed in many years from the end of June through to September – presumably post-breeding/juvenile birds that are congregating on-site. Interestingly, the only month in the period 2004-2013 when this species was not recorded was October 2007.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	6	14	4	6	6	13	11	19	12	12	10	23
Median 2004-2013	11	11	14	9	7	9	7	10	11	6	6	12
Maximum 2004-2013	23	16	18	18	14	34	29	23	25	19	12	23

Mallard *Anas platyrhynchos* (10; 250)

Common resident present throughout the year. Birds have also been released for wildfowling in the past.

2013: An average breeding year with only four to six broods reported across the site (2 in 2012) and (9 in 2011). Generally, numbers throughout the year were slightly down on previous years – with a noticeable trough in the period September-December; the maximum count for the year was of just 76 birds on the 5th January.

Summary: Breeding success has been relatively variable over the period 2004-2013 as shown in the table below. Interestingly, the record count in the period 2004-13 was 250 birds on 16th September 2006 – a figure matched by the WeBs counts in December 1983 and September 1997.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Broods	2	2	15	6	7	10	10	9	2	6

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	76	61	19	27	64*	68*	39*	67*	36	26	38	22
Median 2004-2013**	63	55	31	37	59	64	45	66	108	80	69	97
Maximum 2004-2013**	168	101	83	81	92	128	101	193	250	152	134	152

* Includes young birds; Median and Maximum of the monthly maximum for the period 2004-13

Pintail *Anas acuta* (8; 7)

Frequent visitor.

2013: Not recorded.

Summary: First recorded in 1985 there are subsequent records in 1988, 1994, 1997 2000, 2002 and 2003 - mostly involving single birds but with a record count of 7 birds on 10th January 2002. A relatively frequent visitor in 2004 and 2005, the last 8 years has seen this species become a more sporadic visitor again. A summary of records for this species in the period 2004-2013 is shown below. The maximum count in the period 2004-13 was of 4 birds on 1st October 2004.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Records 2004-13	8	4	1	1	0	1	1	1	1	0
Bird Days 2004-13	13	5	3	2	0	2	2	1	2	0

Shoveler *Anas clypeata* (10; 54)

Commonly encountered spring migrant and winter visitor that may occasionally breed

2013: After an exceptional year in 2012 this year was just as amazing - with over double the number of bird days and counts of 10 or more birds than in 2012!. The maximum for the year was of 54 birds on the 29th March – which is also the largest count (for the site) in the period 2004-2013. In fact, between the 24th February and the 7th April there were 11 counts of over 24 birds – the latter being the previous highest count in the current report era (1st and 2nd December 2012). Despite the large numbers – particularly in the spring - this species did not stay to breed this year.

Summary: This is a species that has seen dramatic changes in status over the last 10 years and an attempt to summarise these changes has been made in the tables below. Notwithstanding the limitations of such summaries, a couple of salient points can be made. First, these birds clearly peak during March and April, with over 40% of total bird days being recorded in these two months. Second, this species went from a “regularly encountered visitor” in the period 2004-2006, to a “commonly encountered spring migrant and visitor that may occasionally breed” in the period 2007-2014. Despite hopes for breeding in several recent years, 2007 remains the only year in which breeding was confirmed.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bird Days 2013	134	61	308	104	2	14	2	7	4	28	78	21
Bird Days 2004-13	215	148	545	518	75	66	50	119	121	156	253	231
Percent 2004-13*	8.6	5.9	21.8	20.7	3.0	2.6	2.0	4.8	4.8	6.2	10.1	9.3

* Percentage of bird days in the period 2004-13 that occurred in this month.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No records	22	26	29	81	115	89	71	57	59	72
Birds Days	72	60	62	289	315	214	245	134	343	763
Max Count	15	6	7	15	17	14	13	6	24	54
Counts >=10	2	0	0	7	3	3	3	0	12	25

Teal *Anas crecca* (10; 85)

Frequent visitor and passage migrant. Highest numbers usually observed in the first winter period/early spring.

2013: A slight increase in the number of records this year - 77 (74 in 2012) - but a big increase in bird days with a total of 741 compared to 500 in 2012. The highest count for the year was of 33 birds on the 9th March.

Summary: First reported at Tyttenhanger in 1983, this is one of the species that shows a reasonably predictable pattern of occurrence at Tyttenhanger – as can be seen from Figure 2 and the table below. The last 10 years has produced a little under 1000 records and over 6700 bird days with a maximum count of 72 on the 18th January 2010. However, while the latter count was significant, the highest count we have found was of 85 birds in December 1990 (WeBs) – interestingly another mid-winter record for a species that typically peaks in late winter early spring.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No records	79	104	75	106	144	135	101	79	74	77
Birds Days	443	588	855	449	605	1041	1145	386	500	741

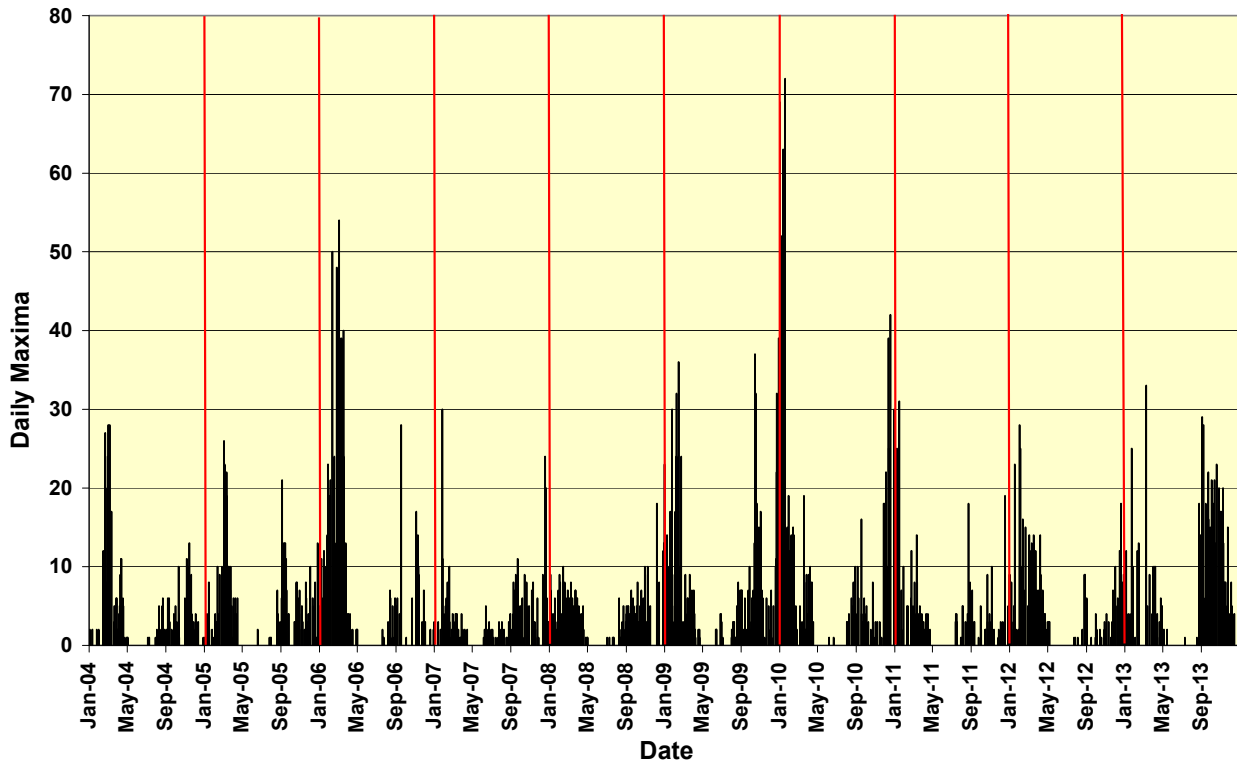


Figure 2. Summary of daily maxima for Teal *Anas crecca* during the period 2004-2013. The red lines show the divisions between years.

Garganey *Anas querquedula* (3; 2)

Infrequent visitor.

2013: Not recorded.

Summary: First recorded at Tyttenhanger in 1986 - when a pair were present from the 19th to 22nd of April - it was subsequently recorded on three further occasions before 2004 i.e. a "sick looking" male on 30th March to 6th April 1991 (found dead on the latter date), a female on 11th August 2000 and a single bird on 17th September of the same year. The last 10 years has added only 3 more records for this species which involved a total of only 4 birds. Interestingly, of the seven records in total, 4 of them have involved birds that have stayed for more than one day.

Red-crested Pochard *Netta rufina* (4; 5)

Irregular visitor

2013: Not recorded.

Summary: Recorded a total of 6 times with the first record in 1988 and the last in 2011. Interestingly 5 of the six records have been in October/November (the remaining record in August) and 3 of the six have involved records of multiple birds - with a maximum count of 5 birds (4 males and a female) on 28th November 2009.

Pochard *Aythya farina* (10; 132)

Reasonably common winter visitor.

2013: This year follows the general pattern of the last 3 years, with birds recorded in all months of the year albeit in small numbers. The maximum for the year was of 18 birds on the 2nd January. A summary of data from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	20	32	12	83	161	112	94	84	53	47
Bird Days	101	127	37	540	885	373	376	312	171	126
Maximum Count	24	12	10	20	31	19	20	27	12	18

Summary: As the table above indicates this is a species that has undergone several changes in status over the last 10 years and continues to re-invent itself as a Tyttenhanger regular. First recorded in the Herts Bird Report in 1986, WeBs counts from 1987 through to 2001 suggest it was much more common in this period than in the last 10 years – with the largest count we have identified in this period being of 132 birds in March 1996. In addition, counts of over 30 birds appear to have been much more frequent prior to 2004 and indeed the last 10 years has only produced a single count of more than 30 birds – which was of 31 birds on 23rd February 2008.

Tufted Duck *Aythya fuligula* (10; 95)

Relatively common species that breeds in some years.

2013: This species successfully bred again this year with 3 broods reported (5-5-4) - two of which were on the Main Pit and one on the pits accessed from the lay-by on the A414. Numbers were much the same as the last couple of years with a maximum of 36 on the 21st April; an unusual month to have the maximum for the year, which is normally in the late winter months (see table below). The implication from the latter observation (as was the case) is that counts in January and February were down on previous years.

Summary: This species was a frequent breeder until the late 1990's after which there appears to be a gap in breeding records until 2007. Since then, this species has bred in all years but 2010 - with up to 4 broods being recorded in some years. Despite its return as a breeding species in the last 10 years, the maximum counts for this species were made in February 2003 (95) and March 1996 (94). The highest count in the last 10 years was of 74 birds on 15th February 2010.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	25	28	30	36	26	11	11	8	3	20	12	4
Median 2004-2013**	43	52	37	33	15	15	16	17	14	17	19	25
Maximum 2004-2013**	59	74	54	47	30	41	37	38	34	50	42	40

* Includes young birds; **Median and maximum values of the monthly maxima for the period 2004-13

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Broods	0	0	0	4	4	1	0	2	2	3

Scaup *Aythya marila* (1; 1)

Vagrant.

2013: Not recorded.

Summary: The only record is of an adult drake found on the Main Pit on the evening of 4th June 2007 which stayed for a further 5 days and was last seen on 9th June. This bird seems to have made something of a tour of the wetlands of south Hertfordshire around this time being seen at Wilstone, Tyttenhanger Amwell, Hilfield, Aldenham and Hilfield again.

Lesser Scaup *Aythya affinis* (0; 1)

Vagrant.

2013: Not recorded.

Summary: The only record is of an adult drake located and identified by Barry Reed and Mick Ilett on the 7th April 1996 that remained on-site until the 18th April. Accepted by the British Birds Rarities Committee, at the time of its occurrence this was the first record for Hertfordshire and only the eleventh British record. It would be fair to say that this was probably the bird that really put Tyttenhanger on the Hertfordshire birding map.

Common Scoter *Melanitta nigra* (0; 1)

Vagrant.

2013: Not recorded.

Summary: The only record for this species was of a female-type bird from the 2nd May until the 7th May 2000. Although there have been several subsequent records in Hertfordshire this remains a real Tyttenhanger blocker!

Goldeneye *Bucephala clangula* (9; 5)

Regular visitor.

2013: For the second year running there was only one record for the year; a female present on 11th November.

Summary: First recorded in 1983 this species has an unpredictable pattern of occurrence – apart from the expected bias of records in the months from November to January. After 1983 this species was recorded in 1990, 1993, 1995, 1996, 1998, 2001 and 2003 and produced an estimated 22 bird days for the period 1983-2003⁴. A summary of records from the last ten years is shown below and indicates that in the majority of years the number of records is 2 or less. However, far and away the best year was 2009, which flowed on into January 2010, and accounted for 35 of the 55 bird days recorded in the period from 2004-13. In the last 10 years the earliest winter date was 19th October (2008) and the latest was the 9th

⁴ Data are from the WeBs counts tables and the body of the text from the Hertfordshire Bird Reports 1983-2003.

January (2004). Males accounted for only 9 of the 55 bird days recorded in the period 2004-13. The maximum count for this species was of 5 birds on 31st October 2009.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Days Recorded	1	5	1	0	2	25	8	2	1	1	46
Bird Days	1	6	1	0	2	31	10	2	1	1	55

Goosander *Mergus merganser* (8; 9)

Regular visitor with one or two records in most winters.

2013: Not recorded.

Summary: As with the above species, the occurrence of Goosanders is subject to an unpredictability that always makes its appearance a pleasant surprise. First recorded on 31st January 1988 this species occurred fairly regularly over the next 12 years until the end of 1999. There then seems to be a gap in records for the site until 2005 – and the records summarised below. The largest count appears to have been of 9 birds in February 1997 i.e. the Herts Bird report states “2 at the end of January, then up to 9 in February and 6 on 19th and 20th December”. The last 10 years has seen it occur in all but the first and last years of that period with it being recorded on a total of 42 days. Relatively long staying birds in November 2007, March 2011, February 2012 and December 2012 slightly distorts the overall picture, but it has certainly been a more regular visitor over the last 10 years than the previous species. The maximum count for the species in the last 10 years is of 5 birds on the 8th January 2006 (including 2 males). It is interesting to note that 34 of the 61 bird days from the last 10 years have been attributable to males. The records from the last 10 years are summarised below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Days Recorded	0	3	1	7	2	1	3	12	13	0	42
Bird Days	0	5	5	7	2	1	3	14	24	0	61

Smew *Mergus albellus* (1; 4)

Infrequent visitor.

2013: Not recorded.

Summary: The first record on-site was of a redhead on the 16th November 1997 which was followed by a male from the 30th November until 14th December 1997, 2 pairs on 24th December 1999, a redhead on 28th and 29th December 1999 and a single bird (sex not reported) on 3rd February 2000. The only record in the last 10 years was of a male on the 11th January 2012.

Ruddy Duck *Oxyura jamaicensis* (8; 8)

Increasingly irregular visitor that has bred in the past.

2013: Not recorded.

Summary: After significant falls in numbers over the last few years the shoot-to-kill policy appears to have now signalled its death knell at Tyttenhanger with no records in the last year and indeed none since March 2012. First recorded at Tyttenhanger in 1989 this overly randy (so we are told) introduced duck was an irregular visitor through the 1990s up until 2002 and 2003 when birds started to over-summer. The species reached its zenith in 2008 and 2010 when 2 pairs bred on-site in each of these years – but as the table below shows, the decline was almost as dramatic as its rise. The maximum onsite count was of 8 birds on 8th September 2008 and the 19th December 2009.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	15	0	1	41	78	70	30	11	2	0

Now that this entertaining species seems to have disappeared all we can do is wait for the first White-headed ducks to turn up – safe in the knowledge they are unlikely to get shagged to death! *Vale Oxyura jamaicensis.*

Grey Partridge *Perdix perdix* (8; 17)

Uncommon visitor.

2013: Two records this year, both on the 16th April, with one bird at Tyttenhanger Farm and one at Willow's Farm (possibly the same bird?). This is an improvement on last year - when there were no records received – but still a relatively poor return for this species.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	0	7	13	7	11	1	1	7	0	1
Maximum Count	0	8	17	7	7	1	3	2	0	1

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days Recorded	1	5	8	10	5	2	2	3	2	2	6	2

Summary: Another species that seems to be declining on-site – matching the trend shown by it, and many other farmland species, across the UK. Despite the recent trend, data from the last 10 years (see below) indicates that the species does show peaks and troughs between years and so hopefully the recent trend will be reversed. First recorded on-site in 1983 birds were reported in the breeding season in the following years (an asterisk indicates that young birds were seen/breeding confirmed):

1984 1986* 1989 1990 1991 1992 1995 1996 1997* 1998 1999

In the last 10 years breeding has not been confirmed on-site but family parties including juvenile birds were noted in 2006 and 2007. The largest count of wild birds was of 17 birds on 12th November 2006.

Red-legged Partridge *Alectoris rufa* (10; 200)

Common resident.

2013: Reported in only ten months of this year with overall numbers seeming to decrease now there is no active release program for shooting. Despite the general decline, local breeding was evident this year with 2 adults and 2 young reported on the 18th July. The maximum for the year was of six birds on the 19th October.

Summary: The status of this species is in flux as the active release of birds comes to an end. The following is a summary of the maximum counts from the last 10 years – provided more as a baseline for the future than as any real insight into the period 2004-11, when releases were still being made. It will be interesting to see at what level this species stabilises and if it goes the way of it's Grey cousin! For the record, the maximum counts of 200 were made on 14th August 2005 and on several dates in September/October 2007.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	160	200	100	200	50	50	70	71	44	6

Pheasant *Phasianus colchicus* (10; 50)

Common resident with the local population previously supplemented by released birds from Tyttenhanger Farm.

2013: Reported in all twelve months of the year – but in relatively small numbers. As in the last few years there were no reports of breeding this year and like Red-legged Partridge - now they are no longer being released for shooting, - numbers seem to be falling dramatically i.e. the maximum for the year was of only ten birds on the 16th April.

Summary: As indicated above, the cessation of deliberate breeding and release for shooting is likely to have a significant impact on numbers– albeit that several past reports have indicated that we thought this species was under-recorded. As with the previous two species, only time will tell what the long term impacts the cessation of deliberate release and shooting will have.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	30	25	50	20	12	13	15	20	17	10

Black-necked Grebe *Podiceps nigricollis* (2; 2)

Infrequent visitor

2013: A very welcome return for this species with one in summer plumage on the 24th March (Birdguides) and one on the 19th April (Jim Middleton); last reported in 2010.

Summary: First recorded in the Hertfordshire Bird Report of 2002 with a single bird on the 8th June, this species has been recorded on a further 8 days since then – with three of these days involving an injured bird on 9th and 10th April 2010 – which was later found dead on the 11th. Other records of single birds were on 5th April 2010 (the bird that was later injured ?) and the two records above from this year. Two birds were recorded on 4th April 2003 and 14th May 2010.

Great Crested Grebe *Podiceps cristatus* (10; 46)

Present throughout the year with small numbers of pairs breeding.

2013: Three pairs bred again this year with two broods recorded on the 26th May and one on the 25th August. Numbers were much the same as last year – but are in keeping with the general trend that has shown a slow but steady increase from around 2006. The maximum count of 39 on the 26th May was the largest count in the period 2004-13 and comprised 35 adults and 4 chicks.

Summary: First recorded in the Herts Bird Report in 1983 there are WeBs data for this species for every year (except 2011) back to 1987. While numbers have been high in the last couple of years, it is interesting that the maximum count on-site is from back in March 1996 – when a count of 46 was made - obviously at a time when there would not have been dependent young present.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	14	15	31	25	39*	18*	20	31	23	22	25	18
Median 2004-2013**	8	15	18	20	16	19	14	19	15	19	18	9
Maximum 2004-2013**	17	22	31	30	39*	27	32	29	23	29	36	24

* Includes young birds; **Median and maximum values of the monthly maxima for the period 2004-13

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
No. Broods	2	0	0	4	5	8	6	6	3	3

Little Grebe *Tachybaptus ruficollis* (10; 16)

Regular breeding species present throughout much of the year – often absent in the winter months.

2013: A species with a very topsy-turvy pattern of occurrence on-site this year with bird days down again - for the fourth year running - but which has had the best breeding year since 2009 with 3 broods reported in August of 2-4-3 young. Summary data for the year are shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bird Days 2013	0	0	4	3	1	2	0	27	1	0	1	0
Total Bird days 2004-13	18	21	111	131	42	42	70	196	116	88	45	43
Median Bird days 2004-13	0	1	14	5	3	3	5	16	3	1	1	0
Max Bird Days 2004-13	12	10	25	40	11	11	24	62	56	53	37	37

* The highlighted cells indicate the months when peak numbers of young birds (including juveniles) are recorded

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total Bird Days	38	10	8	120	140	296	151	75	46	39
No. Broods	0	0	0	1	1	3	2	1	0	3

Summary: First recorded on site in 1984, the WeBs counts from the Hertfordshire Birds Reports indicate that its occurrence was, and still is, somewhat erratic. However, unpredictable as its occurrence may be, looking at the data from the last 10 years (see the tables above) it would be fair to say that the species is often absent between October and February, appears again and is very visible in March and April, becomes secretive in May and June and then reappears – complete with families - in July, August and September, to disappear again by October. However, overlaid on this general pattern is a great deal of variability between years where in some winters e.g. 2009/10, the numbers can be quite high and then in some years the birds are virtually absent all year e.g. 2006. Rather surprisingly the highest count was made on 7th August 2007 when 8 adults and 6 juveniles were seen across the site. The highest count prior to 2004 was of 10 birds in April 1984 (WeBs).

Cormorant *Phalacrocorax carbo* (10; 94)

A common winter visitor with birds present through much of the year.

2013: Reported throughout the year in relatively small numbers, with the usual peaks in the winter months and a maximum of only 20 birds on the 27th March. As the table below shows, this was a typical year in relation to the last 10 years with most monthly maxima being close to the 10 year median.

Summary: This species was first reported from Tyttenhanger in 1989 and included in the WeBs counts from 1992 onwards. The largest count made on site, 94 birds, was for WeBs in January 1997 and in the last 10 years we have seen this record nearly beaten with a count of 91 birds on 6th December 2008.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	15	14	20	15	4	2	2	2	2	4	15	17
Median 2004-2013*	16	14	13	10	5	3	3	6	6	8	20	21
Maximum 2004-2013*	42	62	34	25	8	9	11	11	10	17	59	91

*Median and maximum values of the monthly maxima for the period 2004-13.

Shag *Phalacrocorax aristotelis* (0; 4)

Infrequent visitor

2013: Not recorded.

Summary: First recorded in 1988 when 3 birds were found on the 18th March. Subsequently, 4 birds were present from the 23rd to 27th March with 3 birds (an adult and 2 immatures) remaining from 29th March to 2nd April after which 2 were seen up until 25th April. After this date 2 corpses were found (date unknown) and the surviving bird (an immature) was seen up until 18th June. The only other record was of 1 bird on 5th July 2002.

Bittern *Botaurus stellaris* (2; 1)

Rare visitor

2013: Not recorded.

Summary: First recorded in 1996 when a single bird was seen several times between 18th January and 3rd February then again (presumed to be the same bird) on 15th March. The next record was thirteen years later when a single bird was seen on the 21st, 22nd January 2009 around the Main Pit. Remarkably this was followed in December 2010 by a longer staying bird that showed well from the back viewpoint and the hide and around The Scrape between 4th and 11th December.

Little Egret *Egretta garzetta* (10; 9)

Very irregular visitor in the past with the first record being in 1999; becoming more frequent as this species continues to spread through the UK as a breeding species.

2013: Another big increase over the previous year with a total of 84 days recorded (51 in 2012) and a total of 105 bird days - which makes it by far the best year in the period 2004 – 2013. During the year single birds were recorded on 67 days, 2 birds on 14 days, 3 birds on 2 days and 1 record of 4 birds on the 13th July. It was reported in ten months of the year - with no records in May and December. A summary of bird days and number of records per year for the period 2004 – 2013 is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	16	7	5	2	31	12	21	29	51	84
Bird Days	17	8	7	2	42	12	34	49	58	105

Summary: First recorded in 1999 when 4 birds were reported on the 24th July there were then no records until January 2003 when a single bird was reported. Further birds in March (1) and July (3) of that year was the start of the dramatic rise in recording frequency for this species – which is probably only bettered over the same time period by Red Kite (see p 22). This species is now a frequent occurrence on-site and in the last year reached a recording frequency of around 29.5% (recorded on 18 dates from a total of 61 visits for one regular recorder). The largest counts on-site were of 9 birds on the 6th August 2010 and 13th July 2011. Hopefully this elegant fisherman will continue to increase in numbers and may even one day join the small but growing heronry!

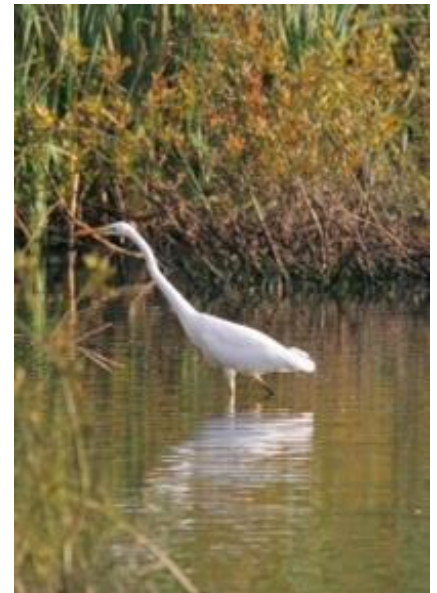
Great White Egret *Egretta alba* (1; 1)

Rare visitor.

2013: The first accepted record for the site was an adult found by Steven Pearce at 10.45am on the back scrape on the 5th October; the bird stayed until 15th October and was seen on all days between these dates. The story of this find – Tyttenhanger's 200th species – follows in the finder's words:

“On Saturday 5th October 2013 I was at Tyttenhanger GP, walking along the edge of the horse paddock towards the scrape, having left the viewpoint overlooking the main pit. Whilst at the viewpoint I had been too busy counting the Wigeon (for the curious, there were five!) to pay much attention to what I assumed was a Little Egret flying in (seen from the corner of my eye). This, fortunately, didn't prove a costly error - when I reached the scrape there was an Egret the size of a Grey Heron wading there! It's plumage was white, with a yellowy/orange bill and darkish legs. When stretched, its neck looked longer than a Heron's, whilst it would flutter its wings occasionally.

There was also a report of a bird on 30th October (Birdguides) – which was probably the same bird that has been doing the rounds of Hertfordshire wetlands at around this time.



This Great White Egret was present between 5th and 15th of October and provided good views for many of the site's regular observers; it was the 200th species for the site. *Photographs courtesy of Simon West*

Grey Heron *Ardea cinerea* (10; 26)

Present throughout the year with numbers rarely reaching double figures. Recently established a small breeding colony.

2013: This is the fourth year in a row that the species has bred on site – despite overall numbers being less than the last couple of years. There were 4 to 5 occupied nests in March and April and the first report of chicks was from the 14th April then 2 chicks on the 28th April – which may represent 1 or 2 broods. Then another 3 chicks a 2 and a 1 were seen on the 12th May, making for a total of 3 or 4 broods for the year.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	6	4	6	9*	7*	6	9	8	10	5	5	8
Maximum 2004-2013**	11	9	10	9*	14*	14	20	26	23	18	8	11
Median 2004-2013**	6	5	6	6	8	9	9	11	10	6	6	7

* Includes young birds; **Median and maximum values of the monthly maxima for the period 2004-13

Summary: The addition of this species as a breeding species in the last 4 years has been a major shift in its status on site – although it's interesting to note that the larger counts for this species come from before this time. First recorded in the Hertfordshire Bird Report of 1983 there are WeBS counts for the species from 1993 onwards which show a fairly stable pattern of occurrence with higher counts tending to occur in the second half of the year. The maximum count on-site was of 26 birds on 6th August 2006.

Glossy Ibis *Plegadis falcinellus* (2; 1)

Rare visitor.

2013: A bird flew across and landed on the back scrape on the 3rd November for a couple of minutes before flying off in the direction of the M25 (Andrew Steele) This record has been accepted by the Herts Rare Bird Panel; making it the fifth county record.

Summary: This year's record is the second for the site, the first being on the 21st September 2009 during the large influx of birds into the UK. Surprisingly this large influx into the UK produced just the one Hertfordshire record – the Tyttenhanger bird. However, perhaps more surprising is that the 2009 bird was the first in Hertfordshire since 1887 and only the fourth record for the county.

Black Stork *Ciconia niger* (0; 1)

Rare visitor.

2013: Not recorded.

Summary: One flew over on the 16th April 1990. This is one of only 4 birds recorded in Hertfordshire in the period 1983-2012.

White Stork *Ciconia ciconia* (2; 1)

Rare visitor.

2013: Not recorded.

Summary: Two records for the site with the first being on 19th March 2006 and the second on 12th May 2012. The recent analysis of this species in Smith *et al.*, (2015) indicates the birds at Tyttenhanger in 2006 and 2012 were 2 of only 13 birds recorded in the county since 1986.

Osprey *Pandion haliaetus* (8; 1)

Regular passage migrant

2013: Two records for the year with the first being a bird flying low over the western end of the pits on 21st April (Roger Jones). The second record was on the 16th May with a single flying south-easterly, low over the north-west corner of the main pit, before gaining height as it was harassed by gulls (Neale Hilder).

Summary: First recorded in 1988 when a bird was around between 2nd and 9th May, this species occurred in only 3 more years (1996, 1998 and 1999) until 2005 – albeit each of those years produced 2 records. In the last 10 years it has occurred in all years - with the exception of 2004 and 2011. In total, the records spanning the years 1988-2013 involve a total of 22 birds with records from April and May predominating (14 of the 22).

Honey Buzzard *Pernis apivorus* (1; 2)

Rare visitor.

2013: Not recorded.

Summary: The first record for the site is of a single bird being mobbed by Jackdaws on 17th May 1987. The next, was of 2 birds seen on the 25th September 2000 and the final record is of 1 on 4th September 2005.

Montagu's Harrier *Circus pygargus* (1;1)

Rare visitor.

2013: Not recorded.

Summary: A bird flying through on 20th April 2011 (Steve Murray) will be the only record for the site if accepted by the Hertfordshire Rare Birds Panel. At the time of writing (May 2015) this record was still in circulation with the Hertfordshire Rare Bird Panel (see <http://www.hnhs.org/birds/birdspanel.php>) - although this record is listed in Smith *et al.* (2015) as one of only 5 in the county since 1983.

Marsh Harrier *Circus aeruginosus* (5; 1)

Irregular visitor.

2013: Not recorded.

Summary: First recorded on the 28th May 1991, there have been a total of 12 records (all single birds) from 8 different years – with 8 of the 12 records having been from the last 10 years. A summary of all records is shown below – indicating that May and August are the peak months to keep an eye out for this somewhat elusive species.

1991	1996	2000	2004	2007	2009	2010	2011
28 th May	13 th Apr 11 th May	12 th Aug	17 th May 28 th Aug	11 th Sep	18 th Jul 6 th Aug 23 rd Aug	7 th May	14 th May

Red Kite *Milvus milvus* (10; 4)

Regular visitor – becoming more frequent as the English population expands from the re-introduction site in the Chilterns.

2013: Recorded on 138 days this year (95 in 2012 and 78 in 2011), the reporting frequency for this species has now climbed to an impressive 52.0% (recorded on 34 dates from a total of 61 visits for one regular recorder) from the 42.0% of 2012. Not surprisingly it was reported in all 12 months of the year and the maximum count was of 4 birds on the 4th June. A summary of the recording frequency during the period 2003 – 2013 for this and the three other common birds of prey on-site is shown in Figure 3.

Summary: First recorded on-site in the 2004 Hertfordshire Bird Report this species has shown an amazing increase in abundance in just 10 years (see Figure 3). This species has rapidly become the most common bird of prey on-site and it remains to be seen at what level the local population will stabilise and when we will record the first Tyttenhanger-born young!

Goshawk *Accipiter gentilis* (0; 1)

Rare visitor; not recorded since 1998.

2013: Not recorded.

Summary: Only two records for the site which are of a single bird on the 26th October 1996 (Brew *et al.*, 1997) and a single (male) on the 10th April 1998.

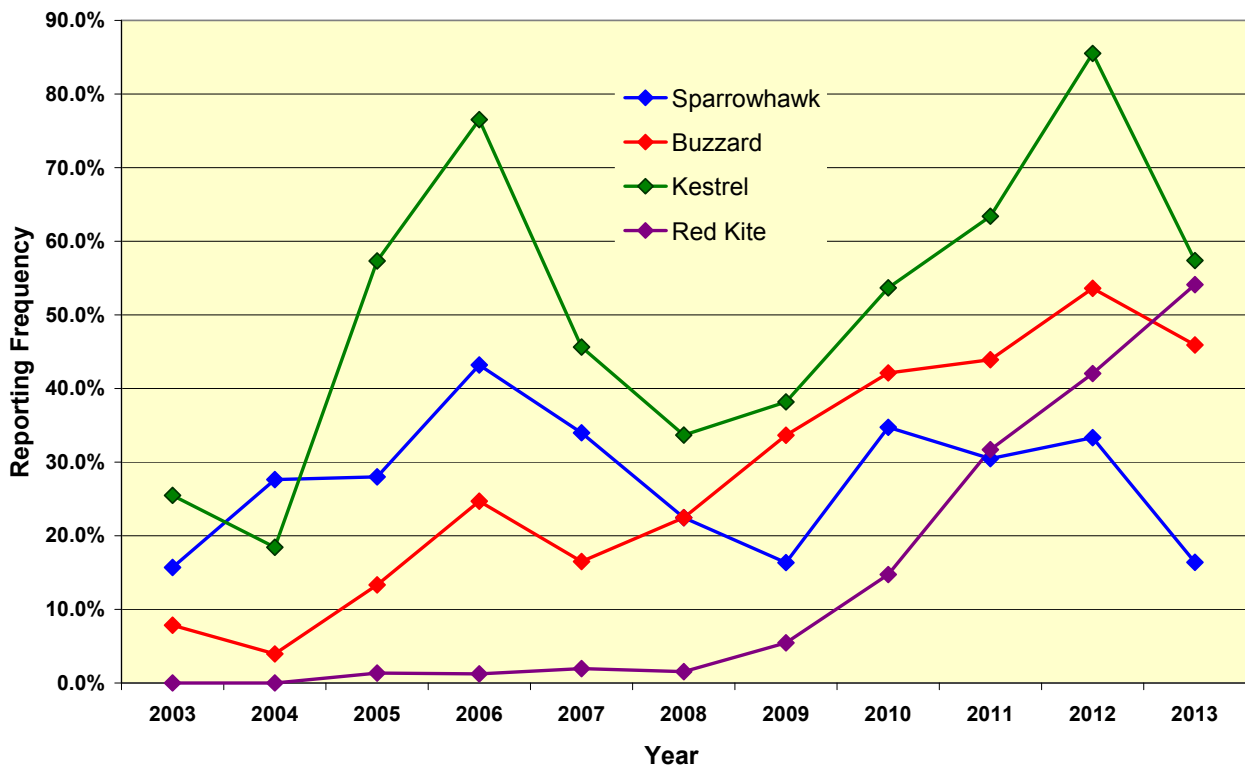


Figure 3. Summary of recording frequency for the more common birds of prey at Tyttenhanger during the period 2003-2013. Recording frequency is calculated from data generated by a single observer for each species-year combination and is based on the number of days-recorded for the year as a percentage of the number of visits. Note only single observer records have been used where the observer is known to record all sightings of the species involved.

Sparrowhawk *Accipiter nisus* (10; 4)

Present throughout the year. Undoubtedly breeds locally but usually not confirmed.

2013: The reporting frequency this year was back down to 16.4% (recorded on 11 dates from a total of 61 visits for one regular recorder). There were no breeding records again this year and there was a maximum of 3 birds recorded on the 30th March and 20th April. A summary of the recording frequency during the period 2003 – 2013 for this and the three other common birds of prey on site is shown in Figure 3.

Summary: Figure 3 shows that the population dynamics of the this species is probably the most stable of the 4 common birds of prey on-site – with a median reporting rate over the last 10 years of 28%. First recorded in the Hertfordshire Bird Report of 1985 there are few records of any note from that source that can add to the data from the last 10 years.

Buzzard *Buteo buteo* (10; 8)

Local resident becoming increasingly more common in Hertfordshire and more frequently observed at Tyttenhanger.

2013: Breeding possibly occurred on site this year with courtship and displaying noted on the 10th April and then 2 adults with 3 juveniles seen on the 16th August. This is the first good evidence of on-site breeding in the last 10 years. The reporting frequency was down slightly this year to 45.9% compared to 53.6% in 2012 (recorded on 28 dates from a total of 61 visits for one regular recorder) - but the general trend over the last 10 years is still upwards. The highest count for the year was of 8 birds on the 12th and 25th May and then again on the 30th September. A summary of the recording frequency during the period 2003 – 2013 for this and the three other common birds of prey recorded on-site are shown in Figure 3.

Summary: This species was not reported on-site until 1991 when a single bird was seen on the 6th January; from this date until the 4th April 2003 there were only 8 further records i.e. only 9 records in total between 1991 and the end of 2003. The rise in the local population of this species has been steady since the beginning of 2004 - albeit not quite as dramatic as that of Red Kite in the last 5 years. While Figure 3 shows the general trend through time the following table shows the temporal variation for this species through the year. Over the 10 years that we have been reporting the data for this species, most years have shown a peak in numbers during the March/May and August/October windows – which may suggest that there is some pre-nuptial movement and post-breeding dispersal.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
No. Days 2013	5	4	6	14	10	8	6	8	6	7	3	4
Median 2004-2013**	5	4	8	10	6	4	4	7	7	7	3	4
Maximum 2004-2013**	7	8	14	15	11	7	7	16	13	9	5	6

**Median and Maximum values of the days recorded for each month in the period 2004-13.

Kestrel *Falco tinnunculus* (10; 5)

Birds of both sexes present throughout the year. Undoubtedly breeds locally but usually not confirmed.

2013: Noted in all months this year and courtship reported on the 17th April; an occupied nest was reported on the 22nd June but there were no subsequent records to confirm breeding. A summary of the recording frequency during the period 2003 – 2013 for this and the three other common birds of prey on site are shown in Figure 3. Interestingly, the reporting frequency (57.4% - recorded on 34 dates from a total of 61 visits for one regular recorder) was much lower than the 85.5% of 2012 – and there are some indications in Figure 3 that this species may have some periodicity in its population dynamics on-site.

Summary: This species was first noted on site in the 1984 Hertfordshire Bird Report and in the last 10 years has generally been present throughout the year. It is interesting to see in Figure 3 that there may be a cyclical pattern in the abundance of this species at the local level and it would be interesting to speculate over what might be responsible for such a pattern. As our fully digitalised records only go as far back as 2008 it may be that we have to wait for a few more years to see if the pattern repeats. In the meantime we'll just continue to enjoy this engaging aerialist and keep a watching brief on its appearances on-site.

Merlin *Falco columbarius* (3; 1)

Infrequent visitor.

2013: Not recorded.

Summary: Between 2008 and 2013 there were 44 reports of this species in Hertfordshire that were considered by the Hertfordshire Rare Birds Panel - only 17 of which were concluded to be sufficiently proven to be included in the Hertfordshire Bird Report. It is therefore not surprising that there are a number of Tyttenhanger records across the years that have been considered to be lacking in conclusive proof – or that come from before the era when records for Merlin were considered by the HBRP. The following list includes all known records from before 2004 and accepted records from after that date.

1996: 1 on 28 th September	1997: 1 on 26 th September	1998: 1 on 10 th April	2000: 1 on 20 th March
2001: 1 on 27 th November	2002: 1 on 10 th January	2004: 1 on 12 th March	2004: 1 on 25 th March
	2007: 1 on 18 th February	2012: 1 on 6 th November	

Hobby *Falco subbuteo* (10; 5)*Passage migrant and summer visitor.*

2013: This species was recorded on a total of 28 days this year and produced a total of 35 bird days; the maximum for the year was 3 birds on the 16th August and 7th September. The first bird of the year was seen on the relatively late date of the 8th May and the last on the 7th October – which equals the previous latest date i.e. 7th October 2010. There were no breeding records this year. A summary of records for the period 2004 – 2013 is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days record'd	19	23	35	25	46	45	30	24	26	28
Bird days	25	34	37	31	72	75	46	32	30	35
Earliest Date*	1 st Apr	26 th Apr	28 th Apr	5 th May	30 th Apr	28 th Apr	6 th May	24 th Apr	5 th May	8 th May
Latest Date*	11 th Sep	17 th Sep	24 th Sep	23 rd Sep	25 th Sep	29 th Sep	7 th Oct	2 nd Oct	21 st Sep	7 th Oct

*The earliest date in spring and latest date in autumn – the earliest and latest dates for the site are shaded.

Summary: First recorded on-site in the Hertfordshire Bird Report of 1983, the next mention from this source is not until 1993 when a family party of 4 birds was noted in September. From then through until 2003 there are records from most years (1995 being the exception) – all in the May-September window. Over the last 10 years this species has been a regular passage migrant and summer visitor relevant data are summarised above. In terms of days recorded/bird days there is an apparent peak in 2008 and 2009, with numbers appearing to have stabilised since then. Median arrival and departure dates from this period are the 29th April and the 24th September respectively. The highest on-site count in the last 10 years was of 5 birds on the 6th May 2010.

Peregrine *Falco peregrinus* (10; 2)*Regular visitor.*

2013: Ten days recorded - all records of single birds - is fairly typical of the last several years for this species. A summary of number of days recorded each year for the period 2004 – 2013 is shown in the table below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	6	4	2	6	5	7	12	24	12	10

Summary: First recorded in the Herts Bird Report on the 23rd April 1994 with the next record not until 9th February 2004. From 2004 onwards the number of recorded days per year have generally been below 10 until 2010, since when, it appears to have increased locally and the number of reported days on-site has increased (see above). The table below indicates that birds occur all through the year - with the best months being January, August and September. The only record of multiple birds was of 2 birds on the 20th June 2011.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days Recorded 2004-13	13	6	9	4	2	5	5	10	13	8	6	7

Water Rail *Rallus aquaticus* (10; 4)*Regular winter visitor in the recent past.*

2013: This was the worst year for this species in the period 2004 – 2013 with only four records - all of single birds (and most likely the same bird!) on the 11th, 13th, 14th, and 24th December. A summary of data from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	4	12	5	8	54	46	28	11	14	4
Maximum	2	1	1	1	4	4	2	1	2	1
Late Date*	NF	1 st Apr	4 th Mar	3 rd Mar	21 st Apr	6 th Apr	6 th Mar	15 th Mar	8 th Apr	NS
Early Date*	19 th Nov	18 th Nov	23 rd Dec	NS	31 st Oct	11 th Nov	1 st Nov	15 th Oct	27 th Oct	11 th Dec

*The latest date in spring (Late date) and earliest date in autumn/winter (Early date)

Summary: First recorded on 17th March 1994 in the Tyttenhanger Bird Report of 1996, this species was not recorded again until 2004. Since this time it has been through a major peak in occurrence in 2008 and 2009 - when conditions were clearly good for both the birds and for seeing them – and which saw a total of 100 days recorded across the two years. Since then numbers have fallen again and we appear to be back at what are probably more typical long-term levels.

Coot *Fulica atra* (10; 214)

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

2013: There were at least 10 broods reported in May and June of this year – which was slightly better than last year’s seven. The maximum for the year was of 130 birds on the 18th August.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2013	116	88	65	81	86*	94*	43	130	63	53	87	66
Median 2004-2013**	80	83	53	56	50	65	68	103	84	47	73	89
Maximum 2004-2013**	148	148	120	81	107	171	207	150	214	178	178	170
Minimum 2004-2013**	1	2	6	6	4	4	6	1	0	0	0	0

* Includes young birds. **Median, maximum and minimum values of the days recorded for each month in the period 2004-13

Summary: Another species that has gone through a number of peaks and troughs over the last 25 years – as shown by the table below – which shows the maximum WeBs count for the year (no WeBs data are currently available for 2011) Notable troughs were in 1992 and then in 2005/2006 – but what may link these two periods is unclear. This species is also a very regular breeder on site with breeding pairs (as indicated by recorded broods) ranging up to 23 (2009). Aside from the WeBs counts the maximum count for the period 2004-13 was of 214 birds on the 2nd September 2011 – which is also the largest count on-site.

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Max WeBs *	14	80	70	25	3	38	72	74	70	61	86	157	120
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	
Max WeBs*	92	60	101	80	6	9	63	157	129	173	NC	126	

*Max WeBs = Maximum WeBs count for the year

Moorhen *Gallinula chloropus* (10; 69)

Common resident with a few pairs presumed to breed most years.

2013: A slight decrease in the number of breeding pairs this year with only 4 to 5 broods reported in June and July (5 to 8 broods in 2012). Overall monthly maxima were a little higher than last year’s with a maximum count for the year of 42 on the 30th November.

Summary: A species that appears to have gone through several peaks and troughs through the period for which we have quantitative (mostly WeBs counts) data. However, one of the biggest surprises when we plotted the monthly maxima for the last 10 years was the observation that this species has been undergoing a slow, but steady increase (Figure 4). This may be due in part to better recording/capture of records, but as the figure below shows, whatever the reason, recorded numbers are on the rise. The largest on-site count was of 69 birds on 11th November 2012; prior to 2004 the largest count was of 40 birds in September 2003.

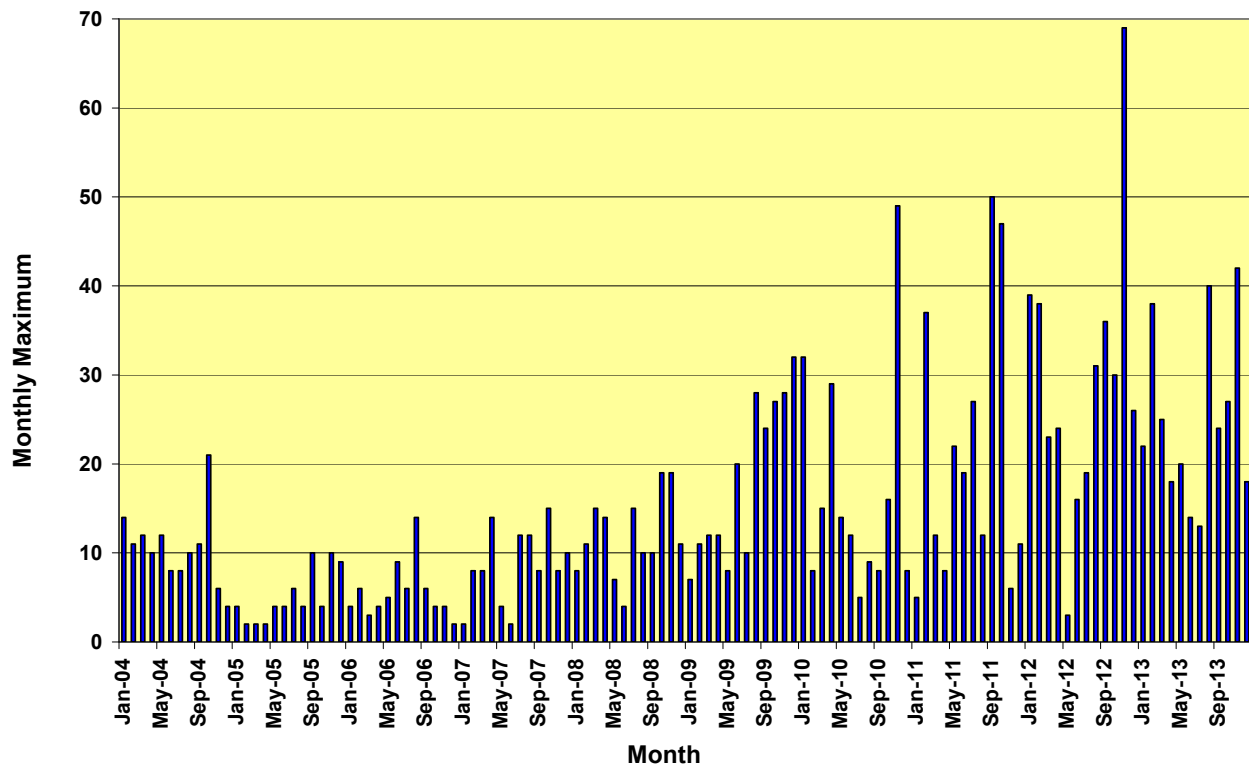


Figure 4. Monthly maxima for Moorhen *Gallinula chloropus* through the period 2004-2013.

Oystercatcher *Haematopus ostralegus* (10; 6)*Regular summer visitor, has bred in the recent past.*

2013: The first bird of the year arrived on the 7th March and was joined by a second on the 16th with the pair being noted until the 28th April. When one of the birds disappeared for about 20 days we believe it was to nest somewhere either on-site or close by. This same sequence of events occurred again in June and we think they possibly attempted to nest twice this year but failed - both times. Both were back together again from the 22nd June until the 20th July and then only one bird was seen until the 28th July. A good year in many ways – but disappointing that they didn't succeed in their breeding attempts. A summary of data from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	5	2	30	50	76	67	84	60	57	71
Early Date	14 th May	26 th Feb	6 th May	28 th Mar	6 th Mar	6 th Mar	27 th Feb	28 th Feb	3 rd Mar	7 th Mar
Late Date	16 th Jun	23 rd Jul	20 th Jul	20 th Jul	23 rd Jul	18 th Jul	22 nd Jul	15 th Jul	29 th Aug	28 th Jul

Summary: First noted in the Hertfordshire Bird Report on 22nd May 1985, this species was a sporadic visitor up until 2007 when numbers of days recorded and numbers of birds increased dramatically. This is undoubtedly due to the pairs that have attempted to breed in and around Tyttenhanger from 2007 onwards – and which achieved success on-site in 2008 (1 chick) and 2010 (2 chicks). Most of the breeding activity appears to be concentrated in the period March-July and by far the majority of records are from this period. In fact, of more than 560⁵ days recorded from 1985-2013 only 10 records are not in the March-July window. The maximum count for the site is of 6 birds which has been made twice - on the 2nd March 2003 and 12th May 2007.

Black-winged Stilt *Himantopus himantopus* (0; 1)*Vagrant.***2013:** Not recorded.

Summary: A bird at Radlett Aerodrome from 27th -28th May 1998 was eventually accepted by the BBRC as the third record for Hertfordshire – previous records being at Chandlers Cross on 7th May 1984 and Tring Sewage Farm on 16th May 1987. Interestingly the Hertfordshire Bird Report for 1998 states "It [the Radlett bird] was also probably seen in flight at Tyttenhanger GP on the 25th" - and since this time it has been accepted on the Tyttenhanger list. It would however be nice to have another record in the not-too-distant future ... just to be sure!

Avocet *Recurvirostra avosetta* (6; 8)*Infrequent visitor.***2013:** Not recorded.

Summary: The first record from the site is of 2 birds on the 23rd May 1988, after which there were two further records before 2004 i.e. 1 on 28th March 1993 and 3 on 11th June 1997. The last 10 years has seen records on a further 9 days with the largest count being of 8 birds on the 7th March 2011. Interestingly, all of the days on which this species have been recorded fall in the March-June window – with March and April claiming 9 of the 12 days recorded.

Stone Curlew *Burhinus oedicnemus* (1; 1)*Rare visitor.***2013:** Not recorded.

Summary: The first record was of a single bird in the Big Field on the 14th April 2002, which was also apparently seen the following day. A second bird was found exactly 5 years later on 14th April 2007 in the fields around Tyttenhanger House, from where, it flew across the fishing lakes to the ploughed fields on their western side. The bird was watched by a number of observers through the day but it did not linger into the following day. The Tyttenhanger records are two of only nine for the county since 1983.

Ringed Plover *Charadrius hiaticula* (10; 15)*Passage migrant with a number of birds staying to breed in previous years.*

2013. It is now seven years since this species bred on-site but it was still surprising that the first record of the year was not until the late date of the 10th May. The maximum count for the year was of five birds on the 25th May - one on the sand spit was joined by four that flew in, landed for 20 – 30 seconds and then flew off. This is the highest count since 2008 but nonetheless the number of days recorded and bird days were the lowest in the period 2004-2013. A summary of data for the period 2004-2013 is provided below.

⁵ Records for Oystercatcher from before 2004 cannot be broken down into days-recorded as the information is not available from the Hertfordshire Bird report. Therefore, several long-staying birds e.g. 1 from 24th April to 23rd May 1994, are treated as a single record. Interestingly, of the records from outside the Mar-Jul window, 7 are from the period 1985-2004 i.e. indicating that these wandering birds have always turned up at the same frequency and that recent numbers are dominated by local breeders.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	24 th Jan	16 th Jan	7 th Feb	24 th Feb	23 rd Feb	23 rd Feb	5 th Mar	8 th Feb	19 th Feb	10 th May
Latest Date*	1 st Oct	18 th Sep	17 th Sep	6 th Oct	8 th Oct	29 th Aug	5 th Aug	30 th Jul	19 th Aug	29 th Aug
Days Recorded	91	111	93	101	94	67	51	29	36	11
Bird Days	360	361	287	199	167	105	65	42	60	17
Maximum Count	12	11	10	5	5	3	2	3	4	5

*The earliest date in spring and latest date in autumn – the earliest and latest dates for the last 10 years are shaded.

Summary: First recorded in 1983 this has been a regular breeding species over the last 31 years and records in the Hertfordshire Bird Report from 1983 through until 2003 reflect this by focussing primarily on breeding records. A summary of the breeding years recorded is shown below (number of pairs shown in brackets).

1983 (1)	1986 (1)	1987 (3)	1988 (3)	1991 (1)	1992 (1)
1993 (3)	1994 (3)	1995 (2)	1996 (2)	1997 (2)	2001 (1-2)
2002 (3-4)	2003 (7)	2004 (3)	2005(2)	2006(1)	

Breeding records aside, this species has been recorded in all months from January to October – and we are unaware of any records from November and December. Data from the last 10 years shows that the median arrival date is 21st February and the median departure date is the 7th September. The maximum count on site was of 15 birds in June 2001 – with the largest count in the last 10 years being of 12 birds on 13th March 2004. As the above tables show, this species has declined dramatically as a breeding species since the high point of 2003 and has not bred since 2006 – with numbers generally declining along with the lack of breeding birds.

Little Ringed Plover *Charadrius dubius* (10; 18)

Passage migrant ; former breeding species.

2013: The first bird of the year was on the late date of the 15th April and the maximum for the year was of four birds on the 8th June. There was courtship noted in June but no other breeding evidence reported. A summary of early and late dates for the period 2004 – 2013 are shown below along with data on the number of days recorded, birds days and maximum counts.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	16 th Mar	19 th Mar	21 st Mar	30 th Mar	3 rd Apr	20 th Mar	30 th Mar	29 th Mar	2 nd Apr	15 th Apr
Latest Date*	1 st Oct	1 st Aug	28 th Aug	1 st Aug	8 th Jul	4 th Sep	24 th Jul	10 th Aug	30 th Aug	17 th Aug
Days Recorded	84	80	75	41	31	43	50	76	71	53
Bird Days	393	326	277	65	50	63	69	179	133	88
Maximum Count	12	13	15	4	3	3	3	6	7	4

*The earliest date in Spring and latest date in Autumn – the earliest and latest dates for the last 10 years are shaded.

Summary: The first record for this species is in the Hertfordshire Bird Report of 1983 and the first breeding record was in 1984 when 4 pairs were noted to have reared 5 juveniles. As with the previous species, this species is generally noted in the Hertfordshire Bird Report as a breeding species and so general records are relatively scarce - a summary of the breeding records from the last 30 years is shown below – with the number of pairs shown in brackets.

1984 (4)	1985 (3)	1986 (3)	1987 (7)	1988 (5)	1989 (2)
1990 (2-3)	1991 (3)	1992 (7)	1993 (6)	1994 (3)	1997 (1+)
1998 (1)	2001 (4)	2002 (3)	2003 (7)	2004 (4)	2005 (3)
2006 (2)	2011 (1)	2012 (1)			

As with the previous species, Little Ringed Plovers have shown a general decline in numbers since the apparent peaks of the early 1990's and early 2000's and the last 7 years has seen their numbers dwindle even further – even though there was some evidence of breeding in 2011 and 2012. Records outside of the March-September window are very unusual and indeed, in the last 10 years, the only record outside of this window was of a single juvenile on 1st October 2004. The median arrival date from the last 10 year's data is 29th March (earliest 16th March) and the median departure date the 13th August (latest 1st October); the maximum count in this time was of 15 birds on the 2nd July 2006 (10 adults and 5 juveniles). Against the data of the last 10 years the period from 1983-2003 has yielded the following records of interest: 17 birds on the 17th July 1992, 18 birds (10 adults and 8 young) on the 24th June 1997 (largest on-site count), 2 birds on the 10th March 1997, 1 on the 9th March 2003 (earliest recorded date) building to 8 on the early date of 16th March that year.

Golden Plover *Pluvialis apricaria* (10; 2160)

Regular winter visitor to the area becoming less common in the recent past.

2013: Another average year for this species with just seven records (7 in 2012) three in the first winter period - including a very unusual record of one bird on the 10th May – and four in the second winter period. The last birds of the first winter period were 20 birds on the 20th March while the first returning birds of the autumn were 2 birds on the 11th October. The maximum for the year was 65 birds on the 21st November.

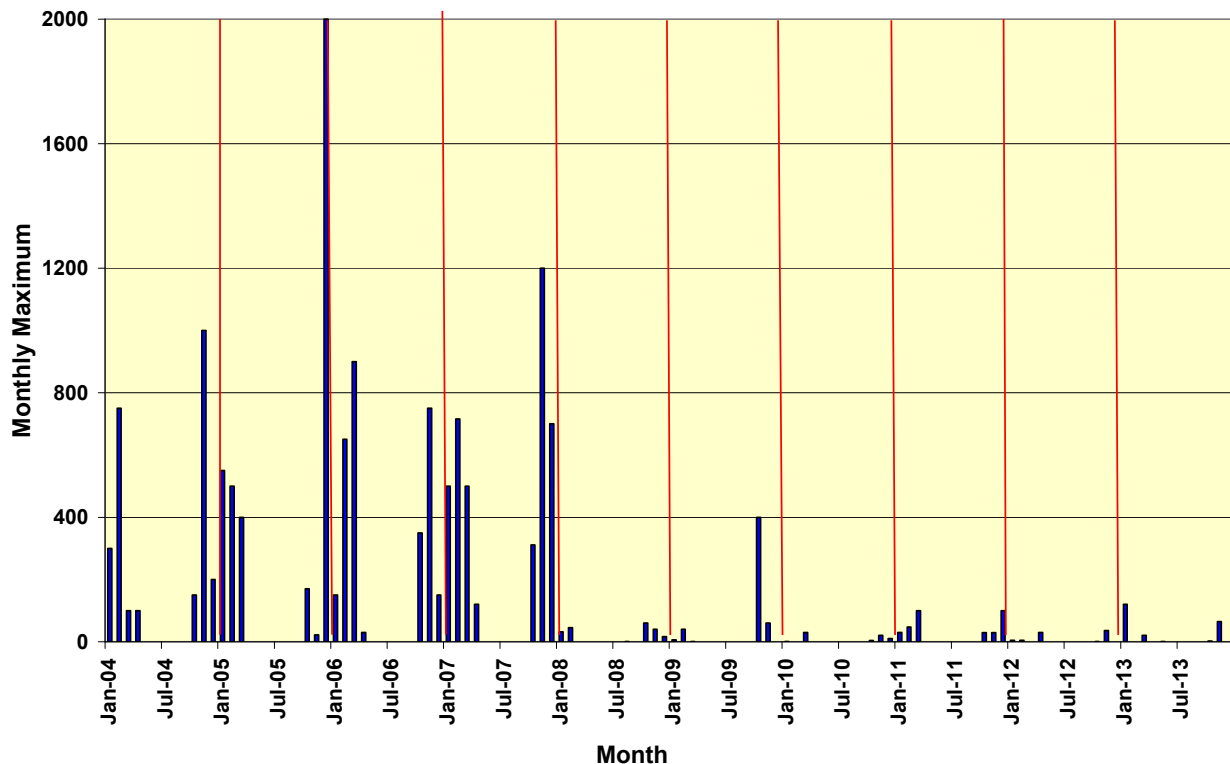


Figure 5. Monthly maxima for Golden Plover *Pluvialis apricaria* shown over the period 2004-2013. Vertical red lines show the divisions between years.

Summary: The first record we have noted for this species is in the Hertfordshire Bird Report of 1985 when 300 birds were seen on the 5th January. Given the large flocks that occurred in southern Hertfordshire in the period from the 1980s through to the early 2000s it is not surprising that the number of records from Tyttenhanger in the Hertfordshire Bird Report are limited. However, there are a few notable records including 2000+ in 2nd January 1996 and 2160 flying over on the 30th November 1998. However, since 2004 this really is a species that has “passed under the radar” in the context of its status at Tyttenhanger. It was, and is, a regular winter visitor over the last 10 years but the very large numbers of the early 2000s are now, very much, a thing of the past. The most effective way to show this decline is graphically and so a plot of monthly maxima from the last 10 years is shown. In Figure 5. This clearly shows the decline of the species on-site during the last 10 years – and is perhaps indicative of a more general decline in southern Hertfordshire? The largest on-site count in the last 10 years was of 2000 birds on 3rd December 2005.

Grey Plover *Pluvialis squatarola* (2; 7)

Rare visitor.

2013: Not recorded.

Summary: The first record of this species was of a summer-plumaged bird on 25th May 1987 and it was recorded a further 16 times up to the end of 2003 - with long-staying birds being present between the 26th September and 11th October 1993 and 27th January and 6th February 1996. The record count was of 7 summer-plumaged birds on 31st May 1991 – which was, and still is, the largest count for the county. Since 2004 there have only been two records – 3 birds flying over at 6.00 p.m. on 26th September 2004 (Robin Pearson) and another single bird also flying over on the 13th August 2006 (Ricky Flesher).

Lapwing *Vanellus vanellus* (10; 2000)

Present through much of the year with large winter flocks using the Main Pit and surrounding fields. Several pairs nest on site most years but success is limited due to disturbance.

2013: Breeding took place again this year with 3 to 4 broods noted in May and June. The maximum for the year was of 340 birds in November. Interestingly, this year produced the lowest monthly maxima in the period 2004-13 for February,

August, September and October. A summary of the monthly maxima for 2013 and other data from the last 10 years is summarised below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max. 2013	300	102	240	50	16*	24*	79	5	36	143	340	189
Median 2004-2013** (Year)	350	429	189	29	16	51	134	196	127	230	251	350
Maximum 2004-2013** (Year)	630 (2005)	617 (2006)	600 (2010)	50 (2007)	50 (2008)	137 (2009)	307 (2009)	1000 (2008)	313 (2008)	700 (2004)	400 (2009)	630 (2005)
Minimum 2004-2013** (Year)	239 (2012)	102 (2013)	43 (2010)	14 (2007)	10 (2012)	12 (2007)	54 (2012)	5 (2013)	36 (2013)	143 (2013)	176 (2012)	150 (2012)

* Includes young birds. **Median, Maximum and Minimum values of the days recorded for each month in the period 2004-13; year of maximum and minimum counts shown in brackets.

Summary: This is one of the few regular breeding species on-site that has managed to maintain status over the last 10 years with up to 4 pairs being noted in most years. The Hertfordshire Bird Reports from 1983 onwards contain a number of breeding records with notable years in 1984 (8 pairs), 1985 (10 pairs), 1986 (7 pairs), 1993 (8 pairs), 1994 (10-14 pairs), 1995 (10-11 pairs), 2002 (10 pairs), 2003 (10 pairs) and 2004 (9 pairs). However, breeding aside, like the previous species— albeit not quite so dramatically – this species has shown a steady decline in overall numbers since about 2009. As the table above shows, the majority of monthly maximum counts in the period 2004-13 were generally in or before 2009 and conversely all of the minimum counts are mostly in the years since. Ironically, the lowest monthly maximum in the period 2004-13 was in August of 2013 – which is also the month that has produced the highest count in this period with 1000 birds on 20th August 2008. A plot of the monthly maxima from the last 10 years is shown in Figure 6.

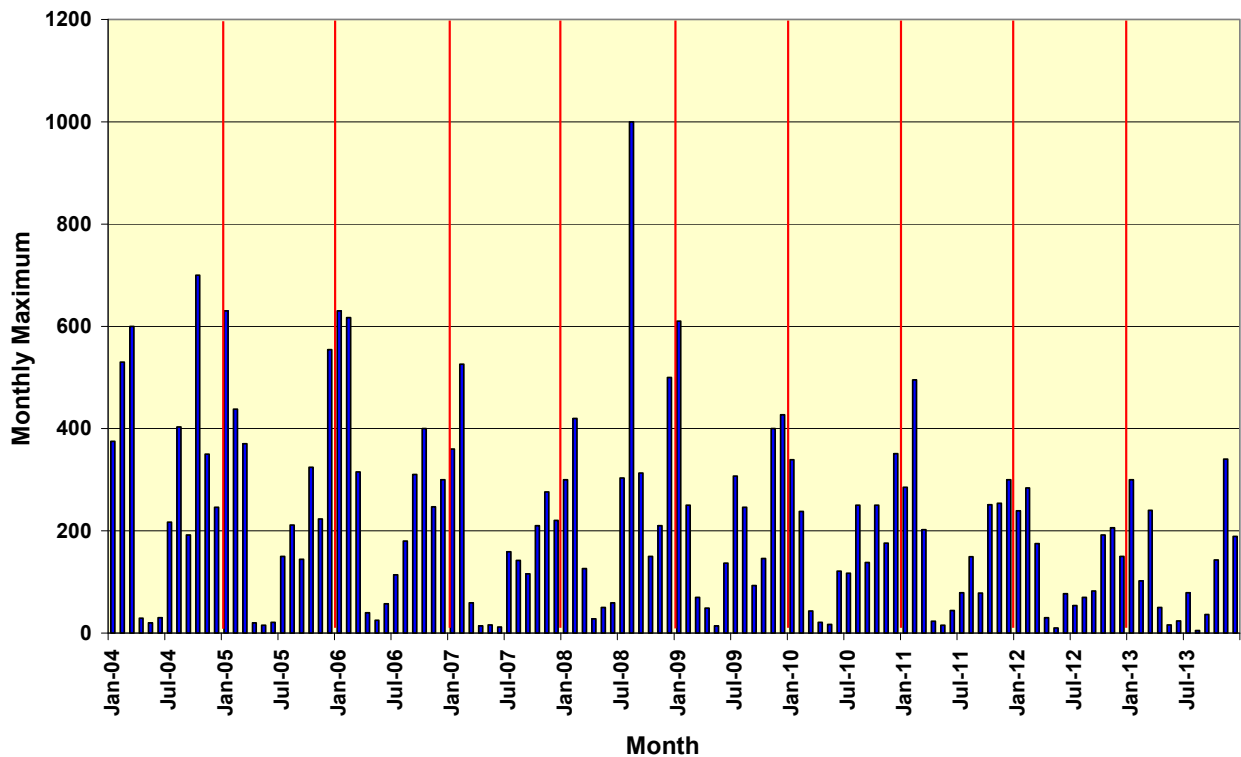


Figure 6 . Monthly maxima for Lapwing, *Vanellus vanellus*, shown over the period 2004-2013. Vertical red lines show the divisions between years.

Looking back on records in the 20 years prior to 2004 we find the first record for this species in the Hertfordshire Bird Report of 1983 – with 300 birds noted on 26th June. In the following 20 years counts of 600 or more birds are unusual with the following counts appearing: 600 on the 19th August 1984, 1000+ on 9th February 1985, 700 on the 6th August 1985, 750 on the 25th August 1990, 850 in August 1991, 2000 on the 5th November 1994 (record on-site count), 1150 on the 22nd October 1997, 1550 on 13th January 1998, 1400 on 3rd December 1998, 600+ on 23rd February 2003 and 1100 on 30th November 2003.

Sanderling *Calidris alba* (7; 4)*Occasional visitor.*

2013: After two blank years it was good to have this species back with a single bird on the 20th May (Steve Blake).

Summary: The first record for this species in the Hertfordshire Bird Reports is a single bird present on the 10th May 1986. After this there were another 11 records up until the end of 1996 – and then an eight year gap until the next record in 2004! The period 2004-13 has generated a further 8 records for this species. Interestingly, of the 20 records (31 bird days) to date, 14 of these (24 bird days) have been in May. All of the available records are shown below.

1 on 10 th May 1986	1 on 22 nd May 1987	1 on 23 rd May 1987	1 on 19 th September 1987
1 on 8 th May 1988	2 on 24 th May 1991	2 on 30 th May 1991	1 on 24 th May 1993
1 on 4 th February 1996	1 on 17 th April 1996	2 on 10 th May 1996	1 on 19 th May 1996
1 on 30 th October 2004	1 on 13 th August 2005	4 on 15 th May 2006	1 on 16 th May 2008
1 on 7 th August 2009	3 on 7 th May 2010	3 on 8 th May 2010	1 on 20 th May 2103

Little Stint *Calidris minuta* (2; 27)*Irregular visitor.*

2013: Not recorded.

Summary: The first record of this species is in the Hertfordshire Bird Report of 1990 when three birds was seen on the 19th September. Subsequent to this record there have been a further 27 records up until the end of 2013⁶. The most remarkable period for this species was during August/September 1996 – when water levels in the fishing lakes were very low and there was lots of mud exposed. During this period the following observations were made:

1996: 1 on 20th August **1996:** 7 on 15th September **1996:** 1 on 20th September **1996:** 22 on 23rd September
1996: 27 on 27th September **1996:** 15 on 29th September

Interestingly, records outside of this stand-out year indicate that this species has a very unpredictable pattern of occurrence as shown in the table below. There were no records from 1983-1990 and then over the next 24 years (1990-2013) the years in which this species was recorded tend to cluster i.e. 1990-91, 1996,97,98 and then 2001,02. Unfortunately this does little to help us predict the next year this dainty wader will appear!

	1990	1991	1993	1996	1997	1998	2001	2002	2004	2007
Days Recorded	1	1	5	6	1	3	5	1	1	8
Bird Days	3	6	7	73	1	3	5	1	1	8

Temminck's Stint *Calidris temminckii* (0; 3)*Rare visitor.*

2013: Not recorded.

Summary: First recorded in the Hertfordshire Bird Report of 1988, a single bird was noted on the 12th May. However, while the lucky observers of this bird may have thought they had a real Tyttenhanger blocker, almost exactly 4 years later 3 birds appeared on the 18th May 2002. There have been no subsequent records.

Knot *Calidris canutus* (5; 4)*Infrequent visitor.*

2013: Not recorded.

Summary: The first Hertfordshire Bird Report record for this species was on 19th August 1986 which was followed by a seven year gap before the next record on 11th September 1993. Subsequent records have been just as scant and this has been one of the most infrequent on-site visitors amongst the regular British migrant waders, with a total of only 9 records and 20 bird days over the 27 years since the first record. – with the long staying bird of February 2006 accounting for 6 of those bird days! The largest count was of 4 birds (including 3 summer plumage birds) on 2nd June 2012.

Dunlin *Calidris alpina* (10; 12)*Regular passage migrant and occasional visitor likely to turn up at any time of the year.*

2013: An average year for this species with 13 records from five months of the year and a maximum of just 2 birds on the 21st May and 30th July. A summary of records from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	34	26	17	23	17	33	9	19	15	13
Bird Days	72	39	30	35	21	46	9	40	19	15
Maximum Count	8	4	6	7	2	4	1	9	4	2

⁶The long-staying bird from 25th to 30th May 2007 is treated as a single record.

Summary: The first record of this species is in the 1983 Hertfordshire Bird Report - which notes a single bird on the 21st April. In the last 10 years this species has been recorded on a total of 206 days for a total of 326 bird days and a breakdown by month of days-recorded in this period is shown below. Clearly this species has distinct peaks in the March-May and July-August periods – but as mentioned before can occur at virtually any time of the year. The maximum count for the species in the period 2004-13 was of 9 birds on the 22nd and 23rd February 2011. Of the 206 days-recorded in the last 10 years, 153 of these have involved single birds only – with less than 5% of the days-records represented by counts of 5 or more birds i.e. only recorded on 9 days.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days Recorded 2004-13	2	8	21	24	37	7	50	26	15	6	9	1

This is a species for which all Tyttenhanger records are not included in past Hertfordshire Bird Reports and so an extensive analysis of older records is not possible. However, in the 21 years up to 2004, counts of 9 or more birds were made on 3 occasions i.e. 12 on the 3rd March 1987, 10 on the 23rd April 1988 and 12 on the 26th April 1997. However, it is also worth noting that counts of 5 or more birds appear only 6 times in the Hertfordshire Bird Reports from 1983-1992 and 3 times in the years 1993-2003- compared with 9 counts in the last 10 years.

Curlew Sandpiper *Calidris ferruginea* (1; 3)

Infrequent visitor.

2013: The only record for the year was of a single bird on the 20th July (Steve Murray). This is also the only record in the period 2004 – 2013.

Summary: The first site-record for this species is in the Hertfordshire Bird Report of 1987 when a single bird was reported on 1st August. Since then, there have been only 7 further records which are shown below. Clearly August is the month to look for this elusive wader.

1987: 1 on 1 st August	1991: 3 on 23 rd August	1993: 1 on 27 th August
1994: 2 on 29 th August	1996: 2 on 6 th May	1996: 1 on 8 th August
1997: 1 from 26 th -30 th September	2013: 1 on 20 th July	

Ruff *Philomachus pugnax* (8; 26)

Infrequent visitor.

2013: The best year for this species in the period 2004 – 2013, with five records involving fourteen birds. The first record was of 3 birds for one brief minute on the 18th August and then another 3 briefly on the 22nd August. Then five birds flew on the sand spit for 4 minutes on 25th August and then there was 2 feeding on the sand spit on the 11th September and the last record of the year was of a juvenile on the 22nd September (RP). A summary of records from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number Of Records	0	2	1	1	1	0	3	2	1	5
Bird Days	0	2	3	1	1	0	3	4	1	14

Summary: Recorded in the Hertfordshire Bird Report as early as 1984 when a single bird was seen on 15th July and 3 on the 19th August. In the following 18 years until the end of 2002, it was recorded in all years except 1989, 1999 and 2000. Records in this period include a number of long-staying birds including those from November 2001 to March 2002 when up to 3 birds were present. Also included in the records from the period 1983-2002 were counts of 10 birds on 30th March 1991 and 26 on the 22nd April 1992 – the two highest on-site counts. From March 2002, there was then a gap in records until March 2005, with the last 10 years producing a total of 17 days-recorded and 30 bird days - with most days-recorded in the March-May and August-October windows. All the records for 2004-13 are summarised below.

2005: 1 on 19 th March	2005: 1 on 20 th March	2005: 1 on 30 th June	2006: 3 on 3 rd October
2007: 1 on 17 th August	2008: 1 on 20 th August	2010: 1 on 10 th May	2010: 1 on 26 th August
2010: 1 on 2 nd October	2011: 1 on 19 th April	2011: 3 on 30 th April	2012: 1 on 26 th October
2013: 3 on 18 th August	2013: 3 on 22 nd August	2013: 5 on 25 th August	2013: 2 on 11 th September
2013: 1 on 22 nd September			

Woodcock *Scolopax rusticola* (7; 5)

Frequent visitor.

2013: There was only one record this year - of a single bird in Garden Wood on the 7th December.

Summary: The first record of this species is in the 1995 Hertfordshire Bird Report when this species was recorded as being present in the autumn and second winter period of that year. The next 8 years, up to the end of 2003, produced only one more record of 2 birds in March 1997. The last 10 years has produced 21 records and a total of 31 bird days – with a maximum count of 5 birds in Garden Wood on 18th February 2012. It is worth noting that records from the last 10 years have been predominantly from Garden Wood (16) with the other records being of 2 birds in flight, 1 corpse (presumed shot – next to Garden Wood), 1 from The Scrape and 1 from Coppice Wood.

Snipe *Gallinago gallinago* (10; 34)

Winter visitor and passage migrant.

2013: A normal year for this species with the interest provided by 3 records in June – which are the only June records from the last five years. Apart from the June records, bird days were much the same as last year and there was a maximum of 13 birds on the 28th March. Summaries of bird days per month and other data for this species are provided in the tables below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bird Days 2013	4	7	31	30	2	3	0	0	4	8	23	6
Median 2004-2013*	6	18	28	23	0	0	0	3	7	20	16	11
Maximum 2004-2013*	44	155	208	100	5	3	6	7	30	54	82	124
Minimum 2004-2013*	0	1	9	3	0	0	0	0	2	3	4	5

* Median, Maximum and minimum bird days for each month in the period 2004-13

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Late Date (1st winter period/spring)	17 th Apr	16 th Apr	15 th Apr	13 th Apr	28 th Apr	4 th May	5 th May	4 th May	21 st Apr	8 th May
Early Date (2nd autumn/ winter period)	17 th Jul	6 th Aug	19 th Aug	30 th Jul	8 th Aug	10 th Aug	7 th Aug	10 th Aug	12 th Aug	3 rd Sep
Maximum Count	8	7	8	8	27	34	7	5	11	13

Summary: Most of the last 10 years have seen a very similar pattern of occurrence for this species, with median dates for the spring departure and autumn return of 24th April and 9th August respectively. Most winters during the period 2004-13 have produced maximum counts in the 7-13 range and total numbers of bird days for both first and second winter periods ranging between 35 and 100. However, in the first winter period of 2008 things really took off for this species and a total of 252 bird days were logged. The second winter period of that year produced 277 bird days and then the first winter period of 2009 a stunning 483; with the highest on-site count of 34 birds being recorded on 14th March 2009 and March recording a total of 208 bird days! In the second winter period of 2009 things fell to a more typical 114 bird days and has stabilised since then to between 39 and 99. The above data are summarised in Figure 7. Perhaps most interesting about this sequence is that a very similar pattern was seen for Water Rail during 2008/09 when numbers rose dramatically before falling again. It is tempting to speculate that conditions at the time were so favourable for both of these normally cryptic species that they had mirrored population explosions and their visibility increased as a consequence.

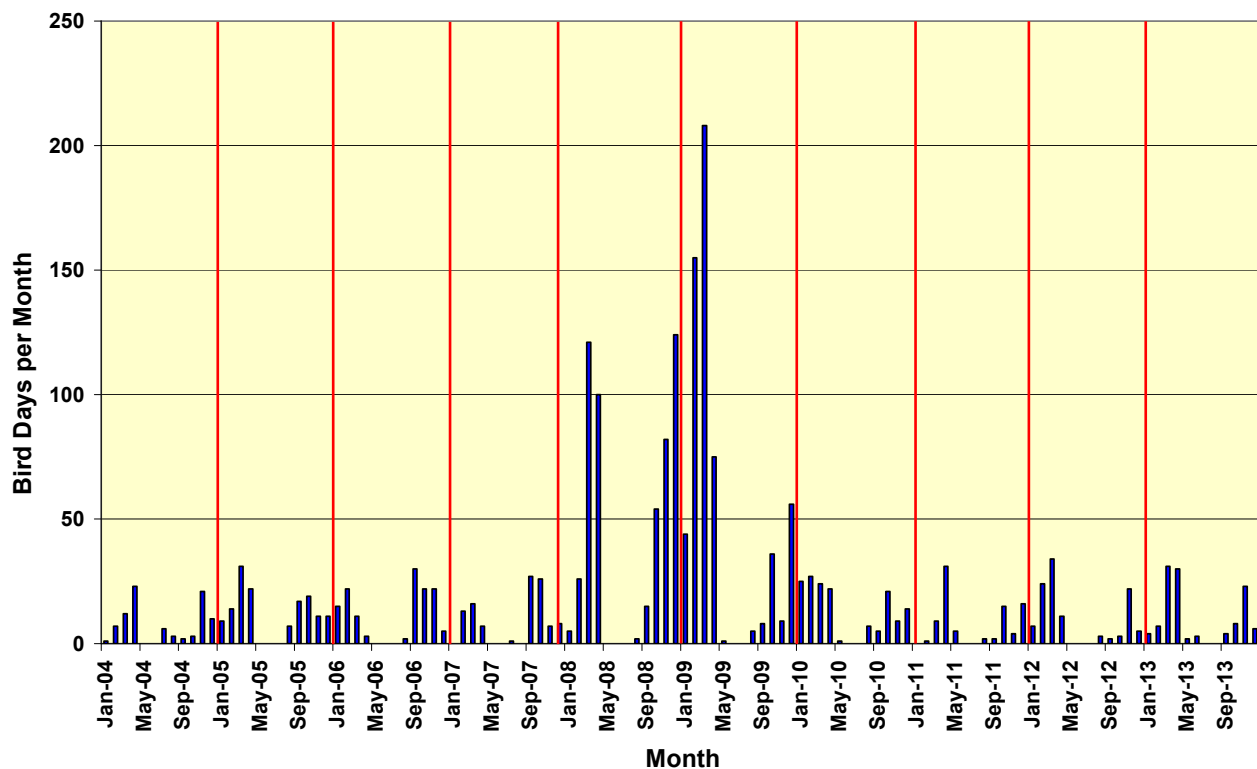


Figure 7. Bird days per month for Snipe, *Gallinago gallinago*, for the period 2004-2013. The red lines show the divisions between years.

Prior to 2004, the first on-site record of this species is in the 1985 Hertfordshire Bird Report and records for this species are relatively well represented in the Hertfordshire Bird Reports, with monthly maxima being provided for the years 1991-1998 and 2000-2003. Using these, and data from the last 10 years, counts of 15 birds or more were found to be significant in the context of the site. On this basis the following monthly maxima are significant:

15 in January 1991	15 in February 1991	17 in March 1996	29 in December 2001
17 on January 2001	16 in October 2001	16 in November 2001	15 in January 2003
16 in November 2008	27 in December 2008	24 in February 2009	34 in March 2009

Months shaded in the same colour indicate the same winter period and the clustering of these high numbers suggest that factors outside of simple habitat suitability are contributing to the good winters that seem to occur every once in a while.

Jack Snipe *Lymnocyptes minimus* (8; 6)

A regular winter visitor whose cryptic habits probably belie its true status.

2013: Four records this year – all in the second winter period - is a heartening return after last year's blank. Records were of 1 bird on 30th October, 3 on the 9th December, 1 on 11th December and 4 on the 14th December. A summary of data from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	5	13	8	2	2	3	0	1	0	4
Bird Days	8	23	15	3	2	5	0	1	0	9
Maximum Count	4	4	6	2	1	2	0	1	0	4

Summary: The first on-site record of this species is in the 1985 Hertfordshire Bird Report which mentions singles of this species in January and February. The next record was of a single bird on the 2nd January 1989 with the following 10 years (to the end of 1998) producing another 13 records – mostly of single birds and a maximum count of 2. There was then a gap in records from October 1998 until 31st January 2004. Since then we have seen this species wax and wane on-site – no doubt due to the suitability of their preferred habitat i.e. The Scrape area of the Main Pit. Numbers definitely appeared to peak in the period 2005-2006 and it is notable that over 50% of the total bird days for the period 2004-13 (66) were recorded in these two years (38). The years from 2010-12 appear to be a trough for this species, but it is encouraging that 2013 showed an increase back to levels from before the 2005-06 peak. The maximum count on site was of 6 birds on the 12th March 2006.

Black-tailed Godwit *Limosa limosa* (9; 25)

Irregular passage migrant.

2013: There was only one record this year of a single bird on the 10th April .

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	0	2	15	2	1	3	3	5	2	1
Bird Days	0	3	18	31	1	7	9	10	4	1

Summary: The first record of this species was of 2 birds recorded on the 24th April 1987. In the following 17 years this species produced a further 16 records (total of 48 bird days) with the most notable being of 11 flying over on the 13th July 1992. Strangely, it then appears to have become a more frequent visitor and the period 2004-13 has produced a total of 34 records and 82 bird days. Clearly the stand-out record is of 25 birds that circled the Main Pit twice at 16.46 on the afternoon of 2nd September 2007 before heading off eastwards (Rupert Pyrah). However, while numerically inferior, the six birds that landed at 7.40 on the morning of 7th April 2006 and hung around the Sheep paddock for most of the morning provided a brighter picture as they included a colour ringed bird that was ringed (Right Leg: Orange over yellow. Left Leg: Green over white (or pale green). = OY-GL) as a male at Pollengi, Árnessýsla (S Iceland) on 27th April 2000. Subsequently seen in France and Portugal it had also paid a visit to Essex before finding its way to Tyttenhanger.

Bar-tailed Godwit *Limosa lapponica* (4; 4)

Scarce migrant.

2013: Not recorded.

Summary: The first post-1982 record of this species was on the 24th October 1987. It was then over eight years before the next bird was seen on the 3rd February 1996, and those are all of the records prior to 2004. Since then the species has become more regular and has been recorded on 8 days spread across 4 years – although this probably represents as few as 8 birds – including 4 birds on the 2nd May 2011 (maximum count for the site). A summary of all days-recorded for the site is shown below:

1987: 1 on 24 th October	1996: 1 on 3 rd February	2004: 1 on 2 nd May	2006: 1 on 1 st May
2011: 2 on 1 st May	2011: 4 on 2 nd May	2012: 1 on 29 th April	2012: 1 on 30 th April
	2012: 1 on 5 th May	2012: 1 on 6 th May	

Whimbrel *Numenius phaeopus* (8; 31)*Passage migrant.***2013:** Not recorded.

Summary: The first on-site record of this species is in the 1986 Hertfordshire Bird Report and shows a single bird on the 13th August. The years up until 2004 produced another 19 records and a total of 38 bird days. The last 10 years has produced a total of 15 days-recorded - all of which have been in April and May – and a total of 59 bird days. Clearly the stand-out record was of 31 birds that were present on the 8th May 2010 (27 flew over and 4 were on the Main Pit) – but 10 birds on the 6th May 2002 and 13 on the 30th April 2011 also warrant mention. Interestingly, since 1986 there have been 26 records in spring and 8 in autumn – all of the latter being before 2004.

Curlew *Numenius arquata* (9; 19)*Irregular migrant.*

2013: There were two records this year of single birds flying over on the 19th April (Jim Middleton) and the 18th November (Steve Murray).

Summary: The first on-site record of this species was in the 1986 Hertfordshire Bird Report with 10 birds seen on 13th August. The next 17 years - up to the end of 2003 - produced a further 27 records and a total of 67 bird days – including a record count of 19 birds on the 27th August 1998. The last 10 years has seen birds occur reasonably frequently to produce a total of 16 records and 21 bird days and it was seen in every year except 2009. Also of interest may be the observation that of the 44 records we have from 1986-2013, these include records from every month of the year with the exception of January and September.

Spotted Redshank *Tringa erythropus* (3; 6)*Irregular migrant.*

2013: The first record since 2006 for this species, with two birds seen at 12.45pm on the rather unusual date of the 10th November. They were present on the main pit before they flew off at 12.53pm (Steve Pearce). This is the first ever November record for this species.

Summary: Since the end of 1982 this species has been recorded a total of 24 times on site – with many records involving long-staying birds. First recorded in the post-1982 period on 20th April 1985, the period until the end of 2003 produced a further 18 records including the record count of 6 birds on the 19th August 1996. The last 10 years has seen fewer records than the previous 10 – but did produce a record long stayer in 2006 that was present almost constantly between 1st January and the 7th February. In total this species has been recorded a total of 24 times since 1985 and produced around 63 bird days – 25 of which were due to the 2006 long-stayer! A breakdown of records by month is shown below – demonstrating that April and August/September really are the best months for this elegant wader.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Records	1*	1*	0	8	1	1	0	8	7	0	1	0

* The long-staying bird of 2006 was counted as 2 records – 1 in January and 1 in February.

Redshank *Tringa tetanus* (10; 14)*Summer visitor with 2-3 pairs breeding in most years.*

2013: The first bird of the year was on the latish date of 7th March with a maximum for the year of just 4 birds noted on the 6th and 7th April. Courtship was reported on the 25th April this year but there were no other signs of breeding. The last bird of the year was seen on the 10th September. This species has not bred on site since 2010 and days-recorded and bird days continue to decrease from the relatively stable numbers observed between 2004 and 2010. A summary of data for the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	91	91	81	93	83	70	91	69	58	30
Bird Days	318	300	288	250	295	291	331	229	177	49
Early Date	3 rd Mar	15 th Mar	12 th Mar	16 th Feb	28 th Feb	23 rd Feb	22 nd Feb	22 nd Feb	29 th Feb	7 th Mar
Late Date	13 th Aug	29 th Oct	25 th Jun	15 th Sep	20 th Jul	28 th Aug	24 th Sep	24 th Sep	12 th Jul	10 th Sep
Breeding (Fledge)*	3 (?)	1 (3)	1 (1)	2 (1)	0	0	0	0	0	0

* No. pairs that attempted to breed (no. fledged young).

Summary: The pattern of occurrence for this species prior to 2004 is unclear due to its relatively common status on-site and the low probability that the majority of records have been incorporated into the Hertfordshire Bird Reports. However, the Hertfordshire Bird Reports do provide some information for the period 1983 to 2003 – including the first record for the site (5 birds on 19th March 1983) and a number of breeding records which are summarised below (no pairs shown in brackets).

1984 (1)	1986 (1)	1987 (2)	1988 (1)	1992 (3)	1993 (2)
1994 (3)	1997 (2)	2003 (3)			

Breeding aside, this species does have a relatively predictable pattern of occurrence – as shown from the data of the last 10 years – and the majority of records occur in the March-July window with the first birds of the year turning up in February or March, and the last departing in August/September. In the last 10 years, from over 750 records there have only been 7 in February, 12 in August, 4 in September and 1 in October – with no records in January, November or December. Counts of 10 or more birds are unusual –the last 10 years having only produced 6 with a maximum of 12 birds on 12th April 2009. Against this framework it is a little easier to interpret the available data from pre-2004 where we have found the following records of interest: 11 birds on the 19th April 1986, 11 on 5th, 11 on 15th and 14 on 17th March 1989 (record on-site count), 12 on 24th March 1994, 12 on 13th April 1995, 1 on 9th October 1996, 1 on 23rd November 1996, 1 in February, 1998 1 on 7th November.1998 and 1 on 8th and 13th November 2003

Greenshank *Tringa nebularia* (10; 18)

Spring and autumn migrant in small numbers.

2013: Three records for the year (is a slight improvement on just two last year) comprising two birds on 12th July and three birds on the 9th and 10th August. A summary of the records from 2004 – 2013 are shown below⁷.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	36	6	51	9	9	6	7	9	2	3
Bird Days	58	10	104	9	14	8	11	20	2	8

Summary: The first on-site record is of a single bird in April 1983. The following years - until the end of 2003 - saw the species occur regularly with entries in the Hertfordshire Bird Report tending to summarise monthly maxima in the peak passage months of April/May and August/September – with occasional unusual records being noted (e.g. early/late dates, large counts etc.). With these data it is difficult to carry out any quantitative analysis, however, this period did yield several significant records with 11 birds recorded on the 16th August 1986 and the 9th September 1996 and an amazing 18 birds on the 27th August 1997. At the beginning of 2003 a long-staying over-wintering bird appeared for the first time (9th February 2003 – early April) which was to reappear every winter after until the end of 2006 (see footnote). This over-wintering bird was not without precedence as there has been a bird recorded in November/December 1988 and December 2000. Since the beginning of 2004 the species has shown a similar pattern of occurrence to the previous 21 years with decided peaks in April/May and August/September. However, as the above table shows, the species has shown a variable pattern of occurrence between years - with obvious peaks (2004 and 2006) and troughs (2012 and 2013) and otherwise recorded on between 5 and 10 days each year.

Common Sandpiper *Tringa hypoleucos* (10; 18)

Regular passage migrant, more frequent in autumn.

2013: The number of days-recorded (54) and bird days (84) are very similar to last year's (48 and 86 respectively), with the largest count of the year being 6 birds on the 26th July. A summary of early and late dates, days recorded and bird days for the last 10 years is shown in the table below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	64	77	58	43	60	47	28	40	48	54
Bird Days	155	153	144	62	111	70	36	56	86	84
Earliest Date	17 th Apr	10 th Apr	15 th Apr	28 th Mar	13 th Apr	14 th Apr	23 rd Apr	23 rd Apr	11 th Apr	16 th Apr
Latest Date	10 th Oct	29 th Sep	5 th Sep	16 th Sep	25 th Sep	9 th Sep	24 th Sep	8 th Nov	28 th Sep	7 th Oct

Summary: The data from the last ten years has shown this species wax and wane in numbers but maintain a fairly consistent pattern of arrival (median spring arrival date 14th April) and departure (median autumn departure date 26th September). Most of the 519 days on which this species has been recorded in this time have been in April/May and July-September with additional days recorded in January (1) March (1), June (13), October (5) and November (1). The highest count in the last 10 years was of 10 birds on the 29th August 2006. As with many of the commoner migrants and breeding species, records in the Hertfordshire Bird Reports are relatively limited. However, for Common Sandpiper there are continuous monthly maxima data from 1990 through to 2004 – when our own data become available. Using all of the data from 1990 thorough to 2013 indicate that monthly maxima of 10 or more birds are significant and the following is a list of months that meet this criterion.

1990: 12 in July	1991: 10 in July	1991: 10 in August	1991: 10 in September
1996: 18 in August	1996: 12 in September	1997: 15 in August 1997	2006: 10 in August

⁷ The totals between 2004 and 2006 do not include the bird days for the long-staying bird that appeared in January 2003 and spent the subsequent winter periods of 2003-04, 2004-05, 2005-06 at Tyttenhanger before making what looks like its final appearance on 10th December 2006. In the calendar years 2004, 2005 and 2006 this bird contributed totals of 46, 64 and 63 bird days respectively.

Other records prior to 1990 include the first record for the site (15th October 1983), and significant counts of 15 on 16th August 1986 15 on 22nd July 1987 and 12 on the 9th August 1988. All in all, the indications are that this species is generally less common than it was in the past –for reasons that even on a larger scale are not obvious (see Smith *et. al.*, 2015)- but nevertheless is still one of the most frequent migrating waders to be found on-site in the peak migration periods.

Green Sandpiper *Tringa ochropus* (10; 14)

Frequent winter visitor and passage migrant.

2013: Another relatively poor year for this species on site with both days recorded and bird days dropping from the apparent recovery of 2012. A summary of early and late dates, days-recorded, bird days and other data for the last 10 years are shown in the table below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Late Spring Date	20 th Apr	27 th Apr	16 th Apr	7 th Apr	20 th Apr	18 th Apr	9 th Mar	4 th May	20 th Apr	20 th Apr
Early Autumn Date	19 th Jun	8 th Jun	18 th Jun	8 th Jun	14 th Jun	13 th Jun	29 th Jun	27 th Jun	4 th Jul	18 th Jun
Days Recorded	158	190	159	106	120	69	19	40	120	67
Bird Days	420	538	501	184	191	105	22	47	175	95
Average Birds/Day*	2.66	2.83	3.15	1.74	1.59	1.52	1.16	1.18	1.46	1.42
Maximum Count	9	9	14	4	8	3	2	5	5	4

* Average number of birds on each day recorded.

Summary: Data from the last 10 years indicates this is another species that has declined markedly since 2006 (see also Ringed Plover and Little Ringed Plover) – although recently showing some improvements on the nadir of 2010/2011. Despite the decline in numbers the pattern of occurrence for this species is still relatively consistent with the first birds of the "autumn" tending to appear in June (early date 8th June) and the last birds disappearing in the following April/May (late date 4th May)– with an obvious peak in numbers in the July-September passage. Generally the species is present through much of the year with an obvious gap in occurrence between the 20th April (median spring departure date) and 18th June (median autumn arrival date) – consequently records from May are unusual⁸. Interestingly, the Hertfordshire Bird Report has provided monthly maxima data in most years – which is summarised in Figure 8. Although there are probably some gaps in the data where numbers appear not to have been reported (eg much of the second half of 1986) i.e. where only exceptional counts appear to have been recorded, these data to show provide interesting insights. For instance, the majority of counts of 10 or more birds are in July August (with 10 birds in October 1986); May records were much more common in the period 1983-2003 with birds being recorded in 10 of these 21 years (compared with only 1 in the last 10 years!) – including an amazing 8 birds in May 1983.

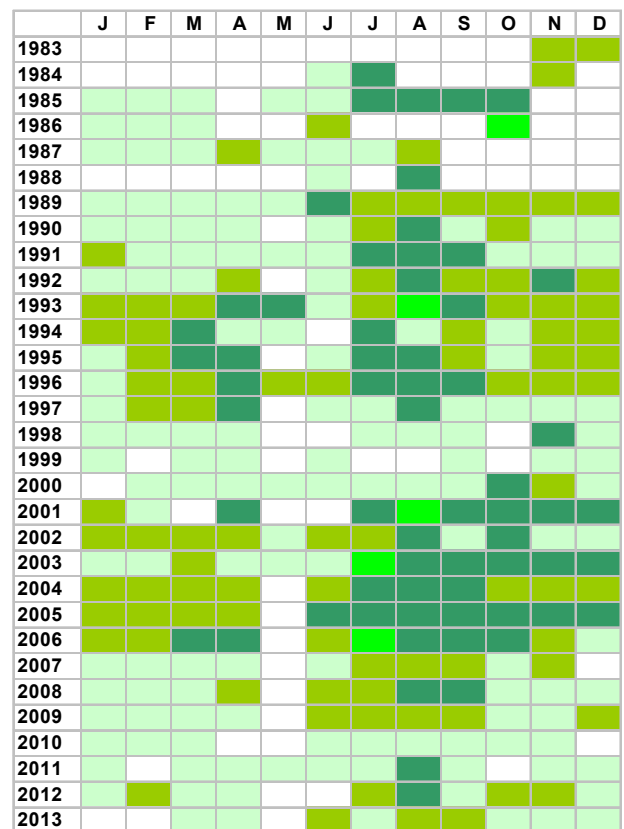
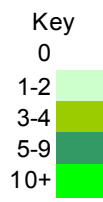


Figure 8. Monthly maxima for Green Sandpiper, *Tringa ochropus*, shown graphically for the period 1983-2013. Monthly maxima are shaded according to the key shown above

Wood Sandpiper *Tringa glareola* (2; 13)

Infrequent visitor.

2013: Not recorded.

Summary: A bird that has become less common in the recent past with the last 10 years producing only 2 records (both

⁸ There are only three May records in the last 10 years – with single birds on the 1st and 2nd May 2011 and 2 birds on 4th May 2011 – presumably one of which was from the two earlier dates.

single birds for a single day) in contrast to the period from 1983-2003 which produced a total of 17 records - at least 4 of which were of long-staying birds and 3 of which involved multiple birds. On the latter point the most remarkable record for this species was of 13 birds on 27th August 1997. First seen circling Hilfield Park Reservoir early that day they were subsequently seen to land at Tyttenhanger for a few minutes later on that day! All records are summarised below.

1985: 1 on 31 st August	1987: 1 on 2 nd May 1987	1988 2 on 3 rd September 1988
1989: 1 on 16 th May	1989: 1 on 27 th May	1991: 1 on 26 th April 1991
1991: 3 on 28 th May	1991: 1 on 1 st June	1993: 1 from 13 th to 21 st August
1996: 1 on 7 th August	1996: 1 from 11 th to 20 th August	1997: 1 on 23 rd May 1997
1997: 13 on 27 th August	2000: 1 on 4 th and 5 th May	2000: 1 from 6 th to 18 th August
2001: 1 on 12 th April	2001: 1 on 22 nd August	2007: 1 on 9 th September
	2009: 1 on 29 th June	

Turnstone *Arenaria interpres* (4; 4)

Uncommon visitor on passage.

2013: Four birds seen flying off to the west at 09.00am on the 15th August (David Booth) is the only record for the year, and the first since 2008.

Summary: First recorded at Tyttenhanger in the Hertfordshire Bird Report of 1991 when 2 birds were seen on the 24th May, there have been 11 further records – which are summarised below.

1991: 2 on 24 th May	1991: 1 on 30 th May	1993: 1 on 22 nd July	1996: 2 on 2 nd May
2000: 1 on 17 th April	2004: 4 on 18 th July	2005: 1 on 27 th July	2005: 1 on 30 th July
2008: 1 on 31 st July 2008	2008: 1 on 3 rd August	2008: 2 on 30 th August	2013: 4 on 15 th August

Interestingly all days-recorded are in April/May and July/August - with July producing 5 of the 12 days-recorded. Further, 5 of the 12 days on which this species has been recorded has involved more than 1 bird.

Scarcer Hertfordshire Waders

	Number of Records	
	Hertfordshire 1984-2012	Tyttenhanger 1984-2012
Stone Curlew	9	2
Avocet	18	12
Dotterel	11	0
Turnstone	74	11
Knot	39	8
Curlew Sandpiper	55	7
Temminck's Stint	4	2
Sanderling	55	15
Pectoral Sandpiper	5	0
Grey Phalarope	12	0
Wood Sandpiper	149	19

The publication of the Birds of Hertfordshire has meant that quantitative summaries are available for a number of species that would not have been available in the past (without a considerable amount of work on the part of the current editors!). The Birds of Hertfordshire uses the period from the last records in Gladwin and Sage (1986) i.e. 1983 up until 2012 as one of its summary periods; so we have done the same here. The table is an attempt to give a relative impression of how Tyttenhanger compares against the rest of Hertfordshire for records of scarcer waders. In some instances we've had to estimate the total number of records for Hertfordshire from the graphical elements of the book and while this may not be completely accurate, it does give a feel for the sorts of numbers involved. Suffice to say that overall Tyttenhanger contributed around 17% of all of the records indicated – but seems to do especially well for Avocets, Sanderling and Temminck's Stints. Hopefully the later will put in another appearance soon!

Black-headed Gull *Chroicocephalus ridibundus* (10; 1900)

Common non-breeding species present virtually all year around.

2013: A relatively normal year for this species, being reported in all months and with good numbers from July until the end of the year. Maximum count for the year was of 516 on the 15th September. A summary of the monthly maxima data from the last 10 years is shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	190	80	210	26	8	10	340	375	516	400	304	502
Median 2004-2013**	245	206	235	17	6	19	284	506	513	345	292	295
Maximum 2004-2013**	500	650	450	30	18	109	432	900	940	500	689	700
Minimum 2004-2013**	50	80	42	1	2	6	115	189	300	240	141	166

** Median, Maximum and Minimum values obtained from the monthly maxima for the period 2004-13

Summary: Generally present throughout the year with a peak in August/September and high numbers continuing into the period October-March. Numbers invariably fall quickly in April and only a few birds linger over the breeding season (April-June) before numbers rise again in July. The highest count in the last 10 years was of 940 birds on 24th September

2009. Records in the Hertfordshire bird report prior to 2004 are relatively scarce however, there are counts of 800 birds on the 7th April 1984, 900 on 28th October 1997, 800 on the 16th December 1998 and a record of 1900+ flying over on the 27th January 1998.

Mediterranean Gull *Larus melanocephalus* (8; 3)

Infrequent visitor.

2013: Birds were reported on nine dates this year compared to 7 in 2012. The first for the year was a juvenile on the 20th July followed by another (different) juvenile on the 27th July. There was then a third, different juvenile, on the 30th July followed by an adult on the 14th August and a 2nd winter on the 28th August. There was then a series of days recorded which possibly relate to the same juvenile/1w bird on 25th, 28th and 30th September and finally on the 4th October. All in all a good year for this species with at least 6 and possibly 7 birds present through the July-October period.

Summary: This species made a relatively late inclusion onto the Tyttenhanger list when an adult bird was seen on the 9th and 11th July 2001. Including these records, the species has been recorded on a total of 37 days with birds of all ages from juvenile to adult involved. A month by month breakdown of the days on which this species has been recorded is shown below and shows the strong bias for records in the July-September quarter. The maximum on-site count was of 3 birds (and adult and 2 juveniles) on the 27th August 2012.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days Recorded	1	0	0	0	0	0	11	14	8	1	0	2

Interestingly, this species is indicated in the Birds of Hertfordshire (Smith *et al.*, 2015) as a "scarce winter visitor and passage migrant" – which is clearly not the pattern of occurrence we see at Tyttenhanger!

Little Gull *Hydrocoloeus minutus* (3; 4)

Irregular visitor.

2013: One on the 16th April (Clive Harding) is only the sixth record for the site.

Summary: First recorded in the Hertfordshire Bird Report of 1987 when an adult bird was seen on the 7th February. It was then another 9 years before the next record followed by gaps of 3, 9, 4 and 1 years. A summary of all records is provided below.

1987: 1 adult on 7th February 1987

1999: 2 1st winter birds on 30th October 1999

2012: 2 adults and a 1st summer bird on 25th April

1996: 1 adult between 14th and 24th January 1996

2008: 2 adults, a 2nd summer and a 1st summer on 23rd April

2013: 1 on 16th April

Common Gull *Larus canus* (10; 256)

Regular winter visitor; absent during the summer months.

2013: Reported in all months of the year apart from June, the maximum count for the year was of 62 birds on the 6th January. A summary of monthly maxima data for the last 10 years is below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	62	36	55	14	4	0	2	3	4	31	38	60
Median 2004-2013*	81	64	79	4	1	0	3	4	4	20	70	66
Maximum 2004-2013*	200	256	218	142	4	4	8	28	16	48	120	119
Minimum 2004-2013*	29	29	26	1	0	0	1	1	2	11	20	36

* Median, Maximum and Minimum values obtained from the monthly maxima for the period 2004-13

Summary: November through to March is generally the peak period for this species, with numbers usually falling through April before most birds disappear for May and June. There are usually small numbers of individuals around in the period July- September before the over-wintering birds arrive. The maximum count in the last 10 years was of 256 birds on the 17th February 2012. Records in the Hertfordshire Bird Reports prior to 2004 are relatively thin on the ground but 100+ birds on 27th December 1995, 100 on 21st February 1998 and 180 on 1st March of the same year are all notable.

Lesser Black-backed Gull *Larus fuscus* (10; 74)

Present throughout the year; with a recently established breeding population nearby in London Colney

2013: A species that continues its upward trend and which recorded its first breeding attempt on site with an occupied nest noted on the 30th April (Steve Murray) - unfortunately no further information was forthcoming. The maximum for the year was of 74 birds on the 18th August – which is the highest count in the period 2004 – 2013. A summary of the monthly maxima data for the last 10 years is presented in the table on the following page.

Summary: The best way to show the ascent of this species on-site over the last few years is graphically – and so a summary of the monthly maxima data for the period 2004-13 is provided below. In combination with the table above we can see that the status of the species hasn't really changed over the winter months (Nov-Feb) when recent years have

been much like the 10 year median. However, over the rest of the year numbers have clearly risen in the recent past with numbers still peaking around August/September, but with much higher peaks than in the past.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maximum 2013	3	5	26	21	14	34	22	74	24	25	16	7
Median 2004-2013**	7	5	7	7	6	5	5	12	8	4	20	5
Maximum 2004-2013**	26	42	26	21	17	44	22	74	40	25	24	13
Minimum 2004-2013**	1	3	5	1	0	3	2	5	5	2	4	4

** Median, Maximum and Minimum values obtained from the monthly maxima for the period 2004-13

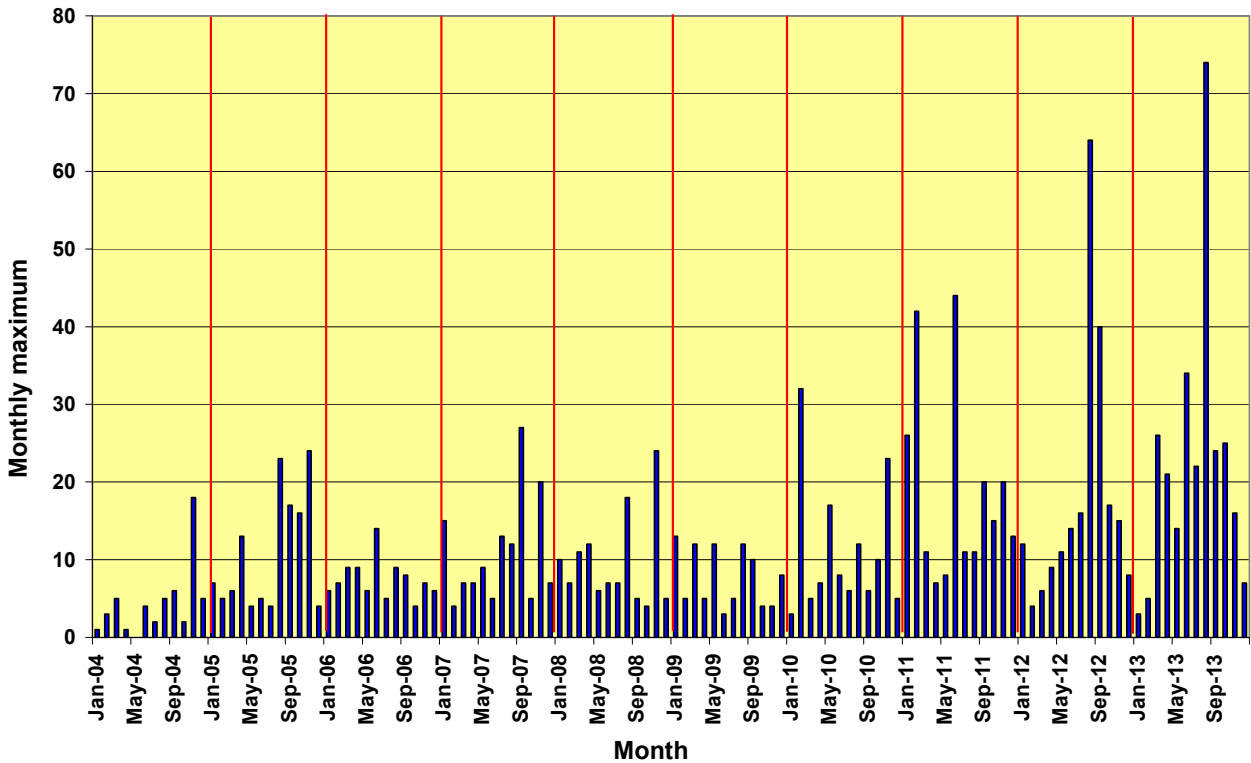


Figure 9. Monthly maxima for Lesser Black-backed Gull *Larus fuscus* for the period 2004-2013. The vertical redlines show the divisions between the years.

Confirming that this species is breeding on the other side of the A1081 is difficult as gaining good views is not possible - although it has been noted that adult birds are visible on the roofs of the industrial park at the appropriate time of year (Ricky Flesher)⁹. However, all of the data indicate that both this, and the following species, are both present in much greater numbers in the summer months than in the recent past - which in itself is a good indication that they are attempting if not succeeding in breeding. Likewise, this bird is generally increasing as a breeding species in Hertfordshire with breeding indicated in 28 tetrads in the 2008-12 breeding birds survey, in contrast to none in 1967-73 and 1988-92 (Smith *et al.*, 2015).

Herring Gull *Larus argentatus* (10; 38)

Present through much of the year in small numbers. Local breeding is increasing records in the summer months.

2013: Another species that is on an upward trend on site with both number of bird days and days recorded increasing dramatically after the new highs of 2011-12 i.e. both parameters have just about doubled in the current year – see table below. The maximum count for the year was of 30 birds on the 18th August - which is the highest number recorded for the site in the last 10 years.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird Days	20	55	75	44	37	37	34	116	125	264
Days Recorded	5	24	24	23	20	21	21	51	43	83

Summary. For most of the last 10 years this species showed a relatively stable reporting rate with around 20 records a year and between 35 and 75 bird days logged. In 2011 though things really took off for this species and the number of days-recorded and bird days began to not only dramatically increase but also showed a shift to records in the May-August period (shaded figures) away from the winter months – as the table below shows.

⁹ At the time of writing (2015) a number of birds have been seen carrying nesting material and at least 6 birds appear to be sitting on nests.

	Percentage of records in each month for periods shown											
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Post-2010*	5.6	2.4	5.6	8.7	15.1	11.9	12.7	15.1	4.8	6.3	7.9	4.0
Pre-2011*	13.7	10.0	14.2	9.5	9.5	3.7	4.7	6.8	6.3	6.3	7.9	7.4

*Days-recorded for the period 2011-13 (Post 2010 = 126) and Pre-2011 (2004-10 = 190) shown as percentages for the two periods.

No doubt this shift in numbers and timing is associated with increased local breeding attempts – most notably on the warehouses on the other side of the A1081 (see also above – Lesser Black-backed Gull). Clearly we'll be trying to keep a watching brief on this. Returning to the pre-2004 period we find there are relatively few records for this species in Hertfordshire Bird Reports, although the following are significant counts: 38 birds on the 28th January 1984 (the highest on-site count and also the first record for the site) and 12 flying over on 26th December 1997. As with the previous species, this bird is generally increasing as a breeding species in Hertfordshire with breeding indicated in 12 tetrads in the 2008-12 breeding birds survey, in contrast to none in 1967-73 and 1988-92 (Smith *et al.*, 2015).

Yellow-legged Gull *Larus michahellis* (8; 2)

Irregular visitor.

2103: Two records for the year of two adults on the 4th January (only the second record of more than 1 bird) and a 2nd summer on the 23rd June - these are the first records for January and June respectively. Monthly distribution of the 19 records to date is shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of Days-Recorded	1	4	4	0	0	1	1	2	0	1	4	1

Summary: First recorded in the Hertfordshire Bird Report of 1996 with single birds on the 29th July and 29th November it was another 9 years before the next record on 5th November 2005. In all, there have been 19 records on-site- all but two of which have been of single birds i.e. an adult and 3rd winter on 19th November 2006 and the 2 adults on 4th January this year being the exceptions.

Caspian Gull *Larus cachinnans* (1; 1)

Rare visitor

2013: Not recorded.

Summary First recorded on the 29th January 2006 (Rupert Pyrah) this was the first accepted record of this (then) subspecies for Hertfordshire. Subsequently raised to species status by the BOU in 2007, there have since been around 11 further birds recorded in the county up until the end of 2012. Interestingly, on the 10th March 2012 a near-adult bird was seen at Tyttenhanger that showed many of the characteristics of this species – but also some influence of *argentatus* Herring Gull and was eventually considered a probable hybrid (Lee Evans).

Iceland Gull *Larus glaucooides* (0; 1)

Rare visitor.

2013: Not recorded.

Summary: A second year bird seen in flight on 26th April 1998 is the only record for the site and is one of only 16 birds seen in the county since 1983.

Great Black-backed Gull *Larus marinus* (10; 13)

An infrequent visitor most often encountered in the winter months.

2013: Three records for the year again, a 3rd winter on the 25th March and then single birds on the 11th and 22nd October. A summary of records from the last 10 years is shown below along with a summary of the months in which birds have been recorded.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	4	5	3	6	2	5	5	5	3	3
Bird Days	4	6	3	10	2	7	6	7	3	3

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of Days-Recorded	6	11	7	2	2	0	0	1	0	3	5	4

Summary: First recorded in the Hertfordshire Bird Report of 1997 when 13 birds were seen on Boxing day, this is, interestingly the only record we have found in the reports up to 2004 – and also a record count for the site!. Since then, and during the time we have been compiling reports, this species has been recorded on 41 days for a total of 51 bird days. Interestingly, of those 41 days-recorded only 7 refer to more than a single bird – with a maximum count of 4 birds on the 14th April 2007.

Kittiwake *Rissa tridactyla* (2; 29)

Infrequent visitor

2013: Not recorded.

Summary: The first record of this species at Tyttenhanger was a staggering 29 birds seen on the 25th January 1993 – unsurprisingly a count that is yet to be bettered. Subsequent to this there are a further 4 records – which are summarised below.

1993: 29 adult birds on 25th January

1995: 1 first winter bird on 26th February

1997: 1 first winter bird on 30th November

2010: a dead bird found on 16th January

2010: a single adult bird on 15th May

Common Tern *Sterna hirundo* (10; 30)

Summer visitor. Regularly attempts to breed but not always successfully.

2013: The first bird of the year was seen on the 7th April and despite reasonable numbers through April and May there was no breeding again this year. Numbers increased through the early part of August to peak with a maximum of 22 birds on the 11th August. The earliest and latest dates along with the maximum counts for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Counts	30	19	14	25	16	20	16	18	20	22
Earliest Date*	4 th Apr	9 th Apr	3 rd Apr	16 th Apr	13 th Apr	8 th Apr	19 th Apr	8 th Apr	11 th Apr	7 th Apr
Latest Date*	30 th Aug	14 th Sep	21 st Aug	2 nd Sep	12 th Sep	14 th Sep	4 th Sep	4 th Sep	3 rd Sep	26 th Aug

*The earliest date in spring and latest date in autumn – the earliest and latest dates for the last 10 years are shaded.

Summary: A bird of surprising regularity over the last 10 years - as Figure 10 shows below – with median arrival and departure dates of 8th April and 3rd September respectively. Despite its regularity this species has only bred twice in the last 10 years (2007 and 2008) i.e. those years when the “island” in the main pit was indeed an island! Records from before 2004 from the Hertfordshire Bird Reports are relatively scarce. However, we are aware that breeding took place in 1996 – which would appear to be the only year apart from 2007 and 2008 when this species bred on-site. The largest on-site count was of 30 birds on the 18th July 2004 and the earliest and latest dates are 4th April (2004) and 27th September (1997) respectively.

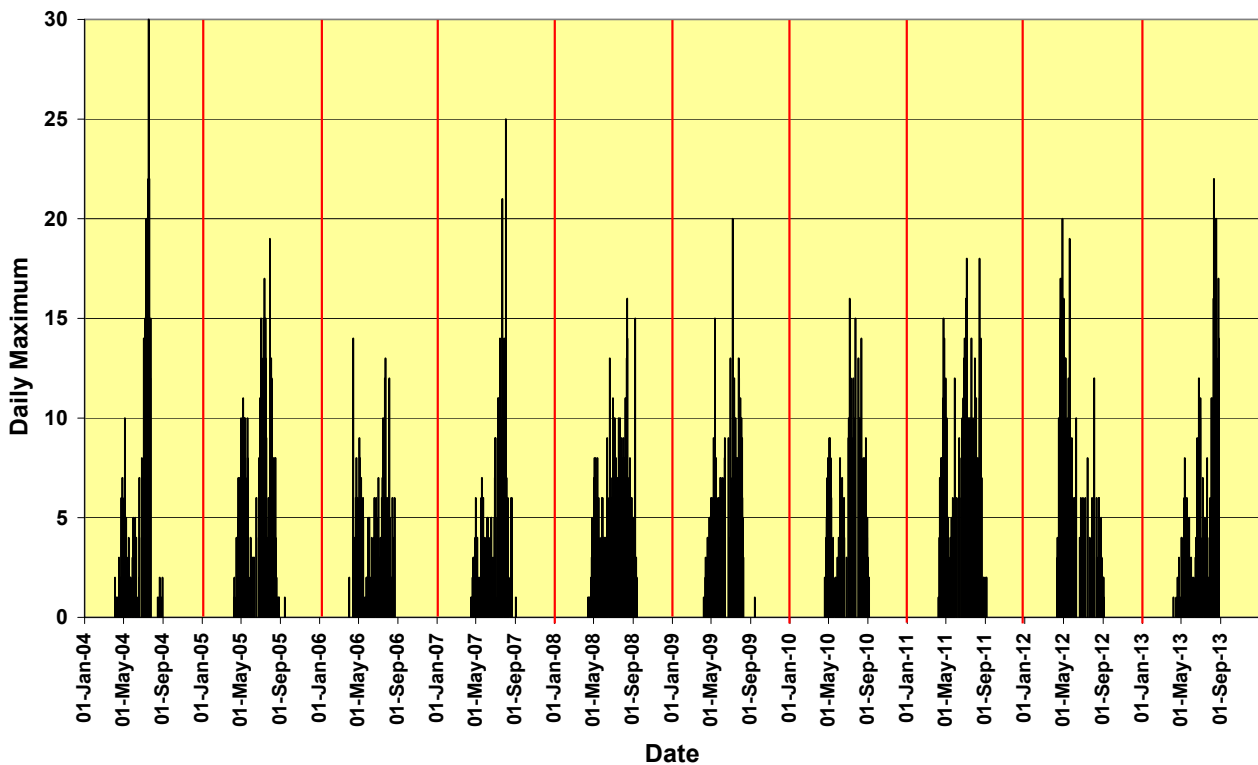


Figure 10. Daily maxima for Common Tern *Sterna hirundo* for the period 2004-2013. The vertical red lines show the divisions between the years.

Arctic Tern *Sterna paradisaea* (1; 31)*Infrequent passage visitor.***2013:** Not recorded.

Summary: The first record from the Hertfordshire Bird Reports is of 2 birds on the 8th May 1991. Since then, there have been a further 7 records including the maximum count of 31 birds on 2nd May 1998. All records are summarised below.

1991: 2 on 8th May **1996:** 2 or 3 on 11th April **1996:** 1 on 3rd May **1997:** 1 on 29th April
1998: 31 on 2nd May **1998:** 1 on 3rd May **2003:** 2 on 5th May **2005:** 1 on 26th April

Given the frequency with which “falls” of this species occur on some of the larger Hertfordshire waters it is perhaps surprising that we have so few records for Tyttenhanger.

Sandwich Tern *Sterna sandvicensis* (3; 4)*Infrequent visitor.***2013:** Not Recorded.

Summary: The first site record is of a single bird on the 1st July 1996, with subsequent records as summarised below.

1996: 1 on 1st July **1997:** 1 on 27th June **2000:** 4 on 22nd and 23rd August
2004: 1 on 3rd May **2010:** 1 on 25th April **2011:** 1 on 4th April
2011: 1 on 10th April

Little Tern *Sternula albifrons* (3; 2)*Very infrequent visitor.***2013:** Not recorded.

Summary: Maybe a little surprising that there are as many records for this species as the previous species - with the first record being of 2 birds (also the record count) on 17th June 1988. All records are summarised below.

1988: 2 on 17th June **1991:** 1 on 21st May **1994:** 1 on 5th August
1997: 1 on 3rd May **2009:** 1 on 7th August **2010:** 1 on 11th July
2010: 1 on 13th July

Black Tern *Chlidonias niger* (5; 20)*Regular passage migrant.***2013:** Not recorded.

Summary: The first record for the site is from 25th May 1987 with a maximum count of 20 birds on the 6th September 1992. In total there have been 36 days on which this species has been recorded and 81 bird days. Of those 36 days, multiple birds were recorded on 13 occasions – although the highest count after the 20 birds mentioned above was of just 5 birds on the 6th May 2000 and 13th September 2008. The distribution of days-recorded by month is shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of Days-Recorded	0	0	0	5	19	0	0	3	8	1	0	0

Feral Pigeon *Columba livia* (10; 1250)*Common resident, particularly common around Willows Farm.*

2013: Present all year with a maximum of 50 on the 26th January. Interestingly, while this species was noted on 62 dates through the year only 24 of these dates were associated with counts! A summary of maximum counts for the period 2004-13 for this and the other regular pigeon species is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Feral Pigeon	n.c	197	1250	188	1000	100	500	100	150	50
Stock Dove	50	200	65	70	50	6	12	10	5	20
Woodpigeon	500	3000	400	2000	732	1000	500	800	300	140
Collared Dove	9	6	57	12	23	18	8	13	2	11

n.c = No Count

Summary: This species does appear to be coming less common on-site, as the table above indicates. The maximum count on-site is of 1250 birds on 2nd December 2006. Interestingly, the first record of this species in the Hertfordshire Bird Reports is in 1996 – but there are no other records of interest.

Stock Dove *Columba oenas* (10; 200)*Common resident present throughout the year.*

2013: Present all year with a maximum count of 20 on the 24th August; there were only two other counts of 10 birds or more this year and there were no confirmed breeding records. Worryingly, of the 66 records for this species received this

year, 46 (70%) of them were logged by just 2 observers. This indicates that this species is still very much under-reported.

Summary: Maximum counts for this species for the last 10 years are shown in the table above – the largest count being of 200 birds on 13th March 2005. As crude as the measure in the above table may be, it does indicate that this species is slightly increasing its numbers on-site after the lows of the last few years – which appears to be in contrast to the fortunes of the other two local *Columba* species. The first record in the Hertfordshire Bird Reports is in 1984. Other significant records from that source are relatively scarce and it is probably a sign of under reporting in other parts of the county that records of 25 on 24th June 1995 and 26 on the 17th October 1997 are in the reports from those years.

Woodpigeon *Columba palumbus* (10; 4000)

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

2013: The maximum count for the year was of just 140 birds – by far the lowest maximum count of the last 10 years. There were however three records of recently fledged young this year (11th and 18th August and the apparently late date of 2nd November).

Summary: This species was first recorded in the Hertfordshire Bird Reports in 1987 and because of its propensity for large, cold-weather movements it is perhaps not surprising that the following observations have also been made: 4000+ on 14th February 1987, 2000 on 24th December 1989 and 790 over on 24th October 1998, with the largest count in the last 10 years being of 3000+ birds on the 5th November 2005. However, as indicated above, the fortunes of this species on site seem to be rapidly waning with only two counts this year of more than 100 birds and no records indicating any large-scale movements in late autumn. As with Stock Dove, *Columba oenas*, there are indications that this species is under recorded i.e. of 115 records, 76 (66%) were submitted by just 2 observers – but it is unlikely that this under-recording can account for the apparent change in status in the recent past. And we will just have to wait and see what happens in the future.

Turtle Dove *Streptopelia turtur* (1; 19)

Very irregular passage migrant.

2013: Not recorded.

Summary: The last 10 years has seen only 2 records - both in 2004 on the 11th April and 11th July. It is therefore surprising that prior to this there are relatively few records in the Hertfordshire Bird Reports i.e. for a bird that would appear to be relatively uncommon in the local area (see below).

1986: 19 birds on 5 th July	1987: 2 pairs breeding	1988: a pair reported
1989: 1 pair suspected breeding	1996: 1 bird	1997: reported in the breeding season
2000: 5 on the 8 th May	2004: 1 bird calling on 11 th April	2004: 1 bird on 11 th July

To put the above in a broader context, in the 1967-73 breeding bird survey this species was indicated as breeding in a total of 444 tetrads – including confirmed breeding in several tetrads close to Tyttenhanger (and “probable breeding in the Tyttenhanger tetrad itself). By 1988-92 the species was declining in the S.E of the county and was indicated to breed in 354 tetrads – with no confirmed breeding close to Tyttenhanger. In the 2008-12 survey the species was not proved to breed in the county at all and breeding activity was only recorded in 62 tetrads – mostly in the N. and E. of the county. With such a rapid decline between 1992 and 2008 it would be nice if more records in this period could be located to see the lack of records is a true reflection of the species on-site status during this time or an anomaly in the recording methodology.

Collared Dove *Streptopelia decaocto* (10; 57)

Patchily distributed resident.

2013: Reported in most months in small numbers with a maximum count of 11 on 1st January; there were no breeding records this year.

Summary: First recorded in the Hertfordshire Bird Report of 1983, there are relatively few records for the next 30 years – and nothing of any note! The maximum count on-site is of 57 birds on the 23rd August 2006.

Ring-necked Parakeet *Psittacula krameri* (7; 11)

Irregular visitor.

2013: There was just one record this year comprising two birds on the 13th September around Willow's Farm.

Summary: A summary of all records is provided below.

1993: 1 on 30 th September	2005: 1 on 5 th November	2006: 1 on 26 th March	2006: 1 on 14 th October
2008: 1 on 5 th March	2008: 1 on 3 rd May	2008: 1 on 4 th May	2008: 1 on 10 th May
2008: 4 on 19 th October	2010: 8 on 18 th March	2011: 11 on 4 th October	2011: 3 on 14 th October
2011: 2 on 29 th October	2012: 2 on 18 th February	2012: 2 on 3 rd March	2012: 1 on 15 th September
		2013: 2 on 13 th September	

With a total of 17 days recorded (with the 3 days in May 2008 and 3 in October 2011) these days are distributed through the year as shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of Days-Recorded	0	1	4	0	3	0	0	0	3	5	1	0

Cuckoo *Cuculus canorus* (10; 5)

Summer visitor in small numbers.

2013: Ten records for the year with just a single record of two birds, makes this another poor year for this species. A summary of data from the last 10 years is shown in the table below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	22	14	22	7	12	12	9	15	17	10
Earliest Date	11 th Apr	16 th Apr	16 th Apr	22 nd Apr	17 th Apr	12 th Apr	24 th Apr	12 th Apr	19 th Apr	24 th Apr
Latest Date	15 th Aug	8 th Jun	28 th Aug	21 st Jul	4 th Aug	14 th Aug	15 th May	1 st Aug	5 th Jun	16 th Aug

*The earliest date in Spring and latest date in autumn – the earliest and latest dates for the last ten years are shaded.

Summary: Like many of our summer migrants and breeding visitors that appear to be decreasing in numbers, arrival and departure dates do not appear to be substantially affected by decreasing numbers – as the table above indicates. The median arrival data for the last 10 years is the 17th April and the median departure date is the 4th August. The following significant records from the Hertfordshire Bird Reports have been found:

1983: An immature on 25th September (first record and latest date)

1997: One bird was observed leaving a Reed Bunting nest on the 22nd May

1999: 1 on 4th April (second earliest recorded date)

2000: 5 on 6th May (largest on-site count)

2003: 1 on 25th March - an exceptionally early date – and also the earliest date for the county.

The maximum count in the last 10 years is of just 2 birds on around 20 of the 140 days-recorded in this time.

Barn Owl *Tyto alba* (4; 2)

Irregular visitor

2013: Three records for the year make this the best year on record for this species. Records were of single birds on 9th February, 24th March and 26th March.

Summary: First reported in the Hertfordshire Bird Report as a single bird that was present on several dates between 19th and 29th December 1997 there were subsequently only three cursory reports in 1998, 2002 and 2003 that stated that birds were seen at Tyttenhanger in those years. Over the last 10 years there have been only 5 days on which this species has been recorded; singles on the 11th March 2006, 19th March 2006, 23rd March 2008 and 27th March 2008 and a record of 2 birds on 19th February 2012. The preponderance of records between December and March is interesting and raises the issue of whether it is truly a winter visitor or whether it is just under reported at other times of the year.

Little Owl *Athene noctua* (10; 4)

Resident; birds usually seen around the Model Railway Club and Willows Farm, regularly breeds.

2013: A bad year for this species with only 10 records - eight of which were from the Model Railway/Water Works and two from the Willow's Farm area. There was only one record of two birds - in the Model Railway/Water Works on the 25th June and there were no confirmed breeding records this year. A summary of records from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	10	9	10	41	54	36	27	42	27	10
Records Of Multiple Birds	3	2	2	10	4	2	1	12	4	1

Summary: The data above suggest that this is a species that is susceptible to quite rapid fluctuations in its fortunes on-site, although the lack of records prior to 2004 doesn't allow any more extensive analysis. Suffice to say that the records prior to 2004 all relate to breeding records:

1996: Reported in the breeding seasons.

1997: An adult with 3 young.

1998: 2 young reported.

2003: Adult and juvenile reported.

The maximum count on-site is of four birds – the 1997 record above and on the 9th and 12th July 2011.

Tawny Owl *Strix aluco* (10; 2)

Resident. Undoubtedly under-recorded but present in most woodland areas on the site.

2013 Recorded on 11 dates this year with all birds heard in Garden Wood from February to April and September to

October. A summary of data for the period 2004 - 2013 is shown in the table below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	2	1	1	10	3	2	3	9	9	11

Summary: Probably still under recorded, it is encouraging to see the recent upwards trend in records for this species despite the relative scarcity of records *per se*. It is also heartening that there is a proportionately high number of breeding records since 1983 including a number of records from the Hertfordshire Bird Reports prior to 2004. These breeding records which are summarised below.

1985 – Confirmed Breeding

1988 – Confirmed breeding

1996 – Juvenile in Garden wood

2007 - 1 young bird in Garden Wood in late June

2007 – begging youngster in Coppice Wood late August

Short-eared Owl *Asio flammeus* (2; 1)

Very infrequent visitor.

2013: Not recorded.

Summary: For a bird that has been relatively common locally i.e the overwintering birds at Beech Farm in the early/mid 2000's, it is surprising that there are not more records for Tyttenhanger ... maybe its just not to everybody's taste. All records are summarised below.

1998: 1 in 2nd October

2004: 1 on 28th February

2004: 1 on 7th November

2011: 1 on 4th December

Long-eared Owl *Asio otus* (0; 1)

Rare visitor.

2013: Not recorded.

Summary: Only two records – both before 2003 – of a bird trapped and ringed on the 28th August 1993 and a single bird on the 8th May 1997.

Swift *Apus apus* (10; 300)

Relatively common summer visitor with feeding birds present throughout the summer months.

2013: This year was slightly better than last year with birds seen on 29 days between 27th April and 28th July and with 13 counts of 10 or more birds. A summary of data from the last 10 years is presented below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date	27 th Apr	23 rd Apr	27 th Apr	23 rd Apr	28 th Apr	28 th Apr	30 th Apr	30 th Apr	26 th Apr	27 th Apr
Latest Date	22 nd Aug	30 th Jul	13 th Aug	29 th Jul	13 th Aug	1 st Aug	20 th Aug	30 th Jul	21 st Jul	28 th Jul
Maximum Count	150	100	50	200	50	30	100	300	30	40

Summary: The appearance of this species is generally regarded as the start of summer and it's arrival at Tyttenhanger in the last 10 years has been remarkably consistent (see above) – with arrivals in all 10 years being in the last week of April (median =- 27th April). Latest Autumn dates are a little more variable (median = 31st July) but most birds have generally left by the middle of August.

Hoopoe *Upupa epops* (1; 1)

Rare visitor.

2013: The first record for the site with a single bird present on 15th April. Found by Keith Charlton the bird was relocated by Steve Blake and Alan Gardiner who put the news out. The find is described below in Steve's words:

"I had walked my usual circuit of The Fishing lakes and other areas of Tyttenhanger. The morning had gone well, with a few species seen. By late morning I was standing watching over the Main Pit from the eastern-bank watch-point. I was eventually joined by Alan Gardiner and, as usual, we were comparing notes of what species we had (or not) seen.

I noticed another birder in the grass field below us, and did not recognise him as a regular. After he had scanned the sand spit from his vantage point he wandered on and out of sight for a while, and eventually walked casually toward us.

We exchanged pleasantries, and no more was said, until I asked, "Have you seen anything interesting?" To which he replied "Yes, there's a Hoopoe behind the hedge in the top grass field and it flew toward the mound in the north corner". "A HOOPOE?" I asked. "Yes, I've seen them in Spain, but not here in England". Alan and I, probably very rudely, collected our gear and left him and went in search of this Hoopoe ... There was no sign of the bird in the top field so we made our way to the Mound, as that was where he last saw it fly too. Still no sign, and after searching for

about thirty minutes, Alan had run out of time and had to leave but I decided to give it another half hour. I stood on the Mound, as this gives a good vantage point to scan the whole area. I was so intent on trying to find the Hoopoe that I had failed to notice that a “fall” of Wheatear was happening all around me. I quickly counted 22 Wheatear and a couple of Yellow Wagtail in the lower field! - but I was more interested in finding the Hoopoe!



Photograph courtesy of Simon West.

As I was counting the Wheatear (again)! I suddenly saw the Hoopoe in flight - quickly land out of sight in the shrubbery at the rear of the Main Pit. A quick phone call to Alan, and he was on his way back, plus a phone call to someone who I knew would send out the news, as I had no time to mess around on the phone! I ran down to the lower field, and there it was, sitting on a fence post. Then going to the ground and happily feeding. It stayed in the same area long enough for several birders to see it, before it decided to leave and flew towards Tythenhanger farm. It was not relocated again. It was not until a few months later that I bumped into the original finder of the bird and was able to put his name - Keith Charlton – to the record! For the record – there was a count of 30+ Wheatear, 3 Yellow Wagtail and a Redstart seen that day.”

Interestingly there have been 18 records of Hoopoe in the county between 1983 and 2012 – all but 4 of these occurring before 2004 with multiple records in 1983 (3), 1987 (2), 1989 (2) and 1990 (2)

Kingfisher *Alcedo atthis* (10; 4)

Resident, present through most of the year, possibly breeding on-site or close by.

2013: The best year for this species since 2008, with a total of 44 days recorded and five records of two birds throughout the year. A summary of data of bird days by month for the last 10 years is shown below along with the data for 2013.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bird Days 2013	5	2	2	1	2	0	1	4	9	4	13	6
Median 2004-2013*	5	2	3	2	2	2	5	8	9	4	7	4
Maximum 2004-2013*	17	10	14	16	12	6	9	26	26	21	15	12
Minimum 2004-2013*	0	0	1	0	0	0	0	2	1	1	1	3

* Median, Maximum and minimum bird days for each month in the period 2004-13

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird days	106	131	85	71	93	48	36	37	18	49

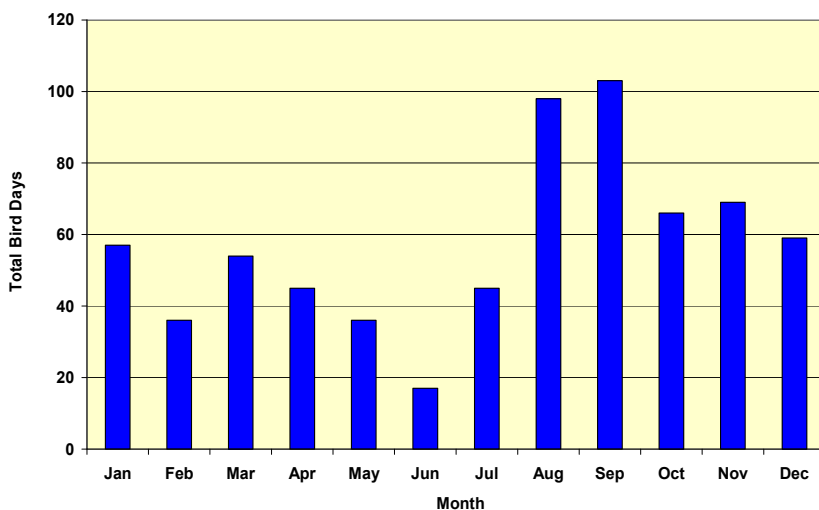


Figure 11 Total Bird Days per month for Kingfisher *Alcedo atthis* during the period 2004-2013

Summary: The slight recovery for this species in terms of bird days in 2013 is shown in the table above – however this species clearly has a way to go to regain the heights of the last 10 years. Notwithstanding the flux in annual numbers of the last 10 years it is interesting to note that the monthly distribution of bird days does indicate a distinct pattern of occurrence for this species – see Figure 11 – with peak numbers occurring in August and September and the trough occurring in May/June. The latter observation indicates that the species does not generally breed on-site but that juvenile birds are frequently seen as they disperse after fledging – presumably from breeding sites along the Colne. Note, the maximum count on site is of 4 birds on 6th March 2004, 31st October 2004 and 26th September 2007.

Green Woodpecker *Picus viridis* (10; 10)*Common resident.*

2013: Present throughout the year with a maximum of 4 birds on the 18th August. Evidence of local breeding was provided by the record of a recently fledged bird on the 16th August.

Summary: Numbers have stayed relatively consistent for this species over the last 10 years and it is generally found throughout the year. Confirmed breeding records are limited, but juvenile birds are a common occurrence in late summer/early autumn. The maximum on-site count was of 10 birds 16th August 2006.

Great Spotted Woodpecker *Dendrocopos major* (10; 5)*Common Resident*

2013: Present throughout the year with a maximum of 3 birds 16th June.

Summary: Much more elusive than the previous species it is perhaps not unsurprising that there are very few confirmed records of breeding. The maximum on-site count is of 5 birds on the 4th June 2005.

Lesser Spotted Woodpecker *Dendrocopos minor* (9; 2)*Resident that has bred in Garden Wood*

2013: Four records for this elusive species makes it the best year in the last ten. Records were of single (unsexed) birds on the 4th January, 18th March, then 2 birds on the 26th March and finally a female on the 9th April. No drumming males heard again this year.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Days Recorded	3	3	1	1	0	3	2	3	2	4	22
Bird Days	3	3	3	1	0	3	2	3	3	5	26

Summary: Records for this species in the last 10 years have generally remained in the 1-3 per year range with the low point being 2008 when the species was not recorded at all. Drumming males are probably the best indication that breeding may take place and as been used as such in a number of Hertfordshire Bird Reports; below is a list of years that drumming or other breeding activity was recorded on-site:

1984 1988 1991 1992 1996 1997 1998 2004 2005

Finally, it is of note that the last time that all 4 past and present editors of the Tyttenhanger reports were together on-site was on 20th October 2012 – when a female of this species was observed along the Colne close to the car-park. Strangely, this sighting was also a first on-site record for one of those four editors ... we'll leave you to surmise which one!

Wryneck *Jynx torquilla* (1; 1)*Vagrant.*

2013: Not recorded.

Summary: A single bird found on 12th September 2010 (David Booth) is the only record for the site. More details can be found in the 2010 report. There were 27 records in the county between 1983 and 2012 – only 4 of which were in the spring – and so the Tyttenhanger record is in keeping with the general trends towards autumn records in the county (Smith *et al.*, 2015).

Skylark *Alauda arvensis* (10; 100)*Breeding resident also recorded as passage migrant and in winter flocks.*

2013: Reported in small numbers in most months with 3 to 4 singing males noted in April. One bird carrying a faecal sac in June was the only indication of breeding for the year. There was a maximum of 19 birds on the 6th October. A summary of data from the last 6 years is shown below.

	2008	2009	2010	2011	2012	2013
Number of Records	116	105	66	66	48	67
Counts of 40+ birds	0	5	4	1	1	0

Summary: A breeding resident and common winter visitor that has undoubtedly been under reported in the past - and is one of the species for which we are currently updating our electronic records for the period 2004-2007. One clear sign of this species' general under-recording is the fact that it does not garner mention on-site in the Hertfordshire Bird Report until 1995! Notwithstanding these issues, the summary above indicates that its status may be more fluid than may have been predicted, which hopefully future analysis will shed more light upon. The highest count in the last 10 years was of 100+ birds on 26th November 2005.

Short-toed Lark *Calandrella brachydactyla* (0; 1)*Vagrant.***2013:** Not recorded.

Summary: A single bird from 7th May until 10th May 1991 was the first county record and was accepted by the British Birds Rarities Committee (G J White). At the time of writing is still the only record for the county (Smith *et al.*, 2015).

Sand Martin *Riparia riparia* (10; 200)*Summer visitor that previously bred. No recent breeding records.*

2013: The first birds of the year (5) were recorded on the 13th April and double figures noted throughout spring and early summer with six records of 30 or more birds. There were no confirmed breeding records again this year. Early and late dates and maxima for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	25	10	50	70	100	50	50	200	50	40
Earliest Date*	2 nd Apr	3 rd Apr	27 th Mar	30 th Mar	16 th Mar	15 th Mar	22 nd Mar	23 rd Mar	17 th Mar	13 th Apr
Latest Date*	22 nd Sep	7 th Oct	3 rd Sep	8 th Sep	7 th Sep	12 th Sep	17 th Sep	20 th Sep	1 st Sep	15 th Sep

*The earliest date in Spring and latest date in autumn – the earliest and latest dates for the last 10 are shaded.

Summary: This species was a regular breeder from 1983 onwards and peaked in the period 1992-1996 when over 100 nest holes were regularly occupied on-site – with a maximum count of 190+ in 1996 (Brew, 1997). However, the last time this species bred on site was in 2002, although it is highly likely that they are still breeding on the pits on the other side of Coursers Road. Arrival and departure dates have remained quite stable through the last 10 years with median dates of 25th March and 13th September respectively. The highest counts in the last 10 years were of 200 birds on 1st, 2nd, 28th May and 28th June 2011 – obviously counts boosted by breeding birds from the other side of Coursers Road.

Swallow *Hirundo rustica* (10; 500)*Summer visitor with small breeding population centred on Willows Farm.*

2013: There were good numbers reported in late April (80) and mid-May (100) and then small numbers throughout the summer months. There were no records of birds breeding again this year – and the last confirmed breeding record was in 2009 at Willow's Farm. The maximum count for the year was of 100 birds on the 11th May. Early and late dates and maxima for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Counts	120	30	105	50	50	50	100	300	100	100
Earliest Date*	5 th Apr	3 rd Apr	25 th Mar	6 th Apr	3 rd Apr	25 th Mar	29 th Mar	26 th Mar	31 st Mar	13 th Apr
Latest Date*	10 th Oct	14 th Oct	8 th Oct	2 nd Oct	11 th Oct	9 th Oct	11 th Oct	15 th Oct	20 th Oct	6 th Oct

*The earliest date in spring and latest date in autumn – the earliest and latest dates for the last 10 are shaded.

Summary: Breeding on-site may well be under reported as their preferred breeding location (Willows Farm and surrounds) is generally avoided by most birders during the breeding season! Median arrival and departure dates for the last 10 years are 3rd April and 10th October respectively and as the maximum counts show, this is a species that is probably maintaining its numbers on-site. Records prior to 2004 are to be found in the Hertfordshire bird reports – although they are relatively limited. However, the following records were identified from this source: 500 on 24th August 1998 (an on-site record) and 1 on 22nd October 1989 (latest site record)

House Martin *Delichon urbicum* (10; 290)*Passage migrant with small breeding population on the Colney Heath margins of the site.*

2013: Reported in small numbers throughout the spring and summer months with a maximum of 50 birds on the 31st May. There were no records of birds breeding again this year and they last bred in 2007 at Park Lane, Colney Heath. Early and late dates and maxima for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Counts	220	150	80	80	20	50	130	150	170	50
Earliest Date*	5 th Apr	16 th Apr	13 th Apr	13 th Apr	11 th Apr	31 st Mar	3 rd Apr	5 th Apr	17 th Apr	13 th Apr
Latest Date*	3 rd Oct	5 th Nov	8 th Oct	22 nd Sep	6 th Oct	11 th Oct	6 th Oct	8 th Oct	2 nd Oct	22 nd Sep

*The earliest date in spring and latest date in autumn – the earliest and latest dates for the last 10 are shaded.

Summary: The median arrival and departure dates for this species over the last 10 years are 1st April and 6th October respectively. The species is the only hirundine recorded in November in the last 10 years with single birds reported on the 4th and 5th November 2005 (the same bird?). The highest count in the last 10 years was of 220 birds on 25th September 2004. Records prior to 2004 are relatively hard to find in the Hertfordshire Bird Reports but there is a record of 290 birds on the 17th September 1997 – which is a site record.

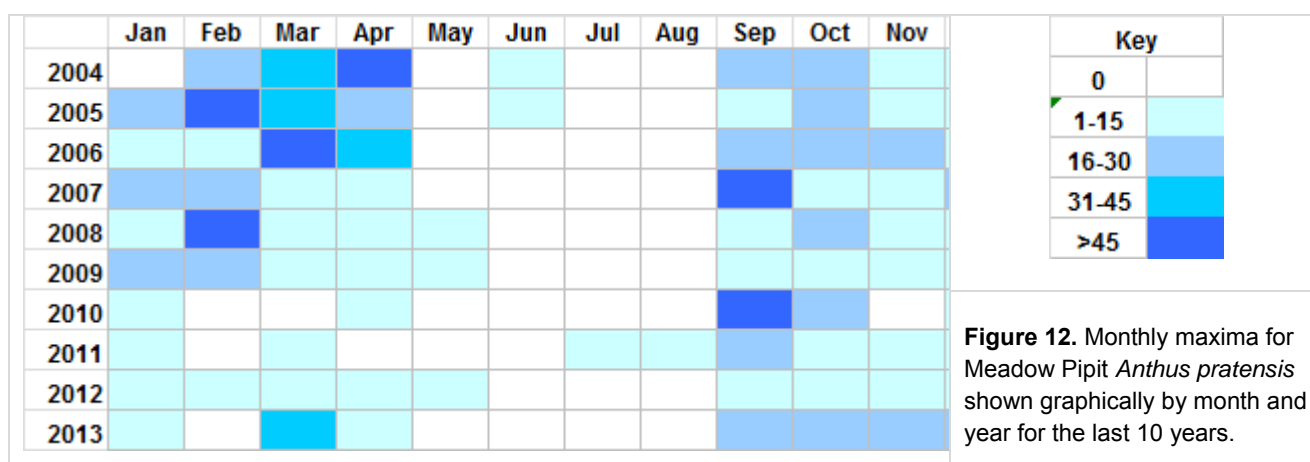
Meadow Pipit *Anthus pratensis* (10; 120)

Winter visitor and passage migrant.

2013: A much-needed improvement for this species with a count of 37 birds in the first winter period (8 in 2012) and 30 in the second winter period (7 in 2012). A summary of maximum counts for the period 2004 – 2013 are present below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Counts	80	60	78	50	52	30	64	25	8	37

Summary: One of those species that is easy to ignore and to which, we ourselves, have not paid much attention in past reports. Figure 12 provides a graphic summary of monthly maxima over the last 10 years which shows how numbers have changed across the period. It is clear that the peak months for this species are Feb-April and September-October – although what we hadn't appreciated previously was just how unusual records in June- August period have been. The maximum count in the last 10 years was of 80 birds on the 8th April 2004.



Interestingly, prior to 2004 there are a number of records in the Hertfordshire Bird Reports – many of which refer to counts that are substantially higher than the majority of counts made over the last 10 years. Significant counts would be those of >45 birds (see Figure 12) and so we have summarised below the pre-2004 counts that meet this criterion.

1987: 60 on the 4 th April	1987: 80 on the 11 th October	1988: 120 on the 20 th March
1989: 120+ on 29 th March	1991: 80 on 12 th January	1992: Upto 70 in Oct-Dec
1993: 100 on 25 th September	1994: 80 on the 1 st October	1995: 55 on the 4 th March
1996: 65 on the 28 th March	1996: 100+ on 7 th April	1996: 50 on 22 nd September
	1997: 80 on 16 th March	

Finally, evidence was found of breeding in 1998 with two singing males present and nest material seen being gathered between the 16th June and 29th June.

Tree Pipit *Anthus trivialis* (0; 2)

Formerly an irregular visitor; not recorded since 1998.

2013: Not recorded.

Summary: A summary of all records from the Hertfordshire bird reports since 1983 are shown below. It is clear that this species has had a dramatic change in status in Hertfordshire since the late 1980s and Smith *et al* (2015) shows that this species was a confirmed breeding species near Tyttenhanger in the period 1988-92 but showed a rapid decline after this. As the following records indicate it was presumably not uncommon at Tyttenhanger up until 1998 and may have even bred close by (?). The decline from the late 1990s is so dramatic that it has not been recorded on-site at all in the last 18 years.

1987: A singing male	1991: 1 on 22 nd September	1992: Up to 2 singing males
1996: 1 on 25 th April	1996: 1 on 7 th August	1996: 1 on 23 rd August
1996: 1 from 8 th – 20 th September	1997: 1 on 9 th April	1997: 1 on 24 th April
1997: 1 on 28 th June	1997: 1 on 5 th September	1998: 1 on 23 rd March
	1998: 1 on 30 th March	

Rock Pipit *Anthus petrosus* (1; 2)*An infrequent visitor***2013:** Not recorded.

Summary: First recorded on the 7th September 1992, there have only been six records – all of which are summarised below. The bird seen on the 22nd March 1996 was noted as showing the characteristics of the Scandinavian subspecies *A. p. littoralis*, but the two records a couple of weeks later in April (the same individual?) make no mention of sub-specific status of the bird seen.

1992: 1 on 7th September**1996:** 1 on 10th April**1996:** 1 on 22nd March**1998:** 1 from 7th to 9th October**1996:** 1 on 6th April**2008:** 2 on 18th October**Water Pipit *Anthus spinoletta* (3; 1)***An infrequent visitor.***2013:** Not recorded.

Summary: The first record for the site was of a single bird on 17th March 1992. Subsequent records have been relatively few with single birds recorded on the following dates; 7th March 1993, 26th September 2004, 8th April 2006 and 29th March 2012.

Yellow Wagtail *Motacilla flava* (10; 30)*Passage migrant with 1-2 pairs breeding in some years.*

2013: A big improvement this year in both the number of days recorded and bird days, see table below. Breeding was confirmed this year after a singing male noted on the 13th May and then an adult seen carrying a faecal sac was seen on the 7th June; two adults were seen feeding a young bird on the 22nd June. The last time they bred was in 2004 (see below). A summary of data for the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird Days	110	41	123	10	49	172	60	23	28	56
Number Days Recorded	38	22	42	7	12	17	24	10	13	33
Maximum Count	25	5	18	3	12	30	10	8	5	5
Earliest Date*	4 th Apr	11 th Apr	6 th Apr	11 th Apr	24 th Apr	7 th Apr	30 th Mar	5 th Apr	17 th Apr	15 th Apr
Latest Date*	2 nd Sep	19 th Aug	3 rd Sep	22 nd Sep	25 th Sep	24 th Sep	5 th Oct	27 th Sep	19 th Sep	14 th Sep

*The earliest date in spring and latest date in autumn – the earliest and latest dates for the last 10 years are shaded.

Summary: As a passage migrant and breeding species, there appears to be an overall tendency for under-reporting this species. However, having said this, records of breeding from the Hertfordshire Bird Reports are fairly comprehensive and so we have been able to construct the following picture of confirmed breeding records for the period 1983-2013 (shaded years are when breeding was confirmed).

1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
					2013				

Breeding aside, although numbers have fluctuated considerably over the last 10 years the timing of spring arrival and autumn departure are relatively consistent with medians of 9th April and 20th September respectively. The maximum count in the last 10 years was of 30 birds on the 31st August 2009.

Blue-headed Wagtail *Motacilla f. flava*: there have been a number of records of the nominate subspecies since the first bird was seen in the company of Yellow Wagtails on 26th and 27th April 1986. Additional records are as follows:

1987 1 on 24th May**1993:** 1 female on 29th April**1998:** 1 on 21st April**2004:** 1 on 1st May 2004**1991:** 1 on 6th May and 2 on the 7th**1995:** 1 on 4th April**1999:** 1 on 18th April**2008:** 1 on 24th April**1993:** 1 male on the 14th April**1996:** 1 on 18th May**2004:** 1 on 20th April

Ashy-headed Wagtail *Motacilla f. cinereocapilla*: there was a bird ascribed to this attractive southern european subspecies present on 28th and 29th May 1991. This is one of only 2 records for the county up until 2012 – the second being at Amwell in 1994.

Grey Wagtail *Motacilla cinerea* (10; 5)*Local resident and winter visitor.*

2013: Another average year for this species with only 18 records and the only good news being that breeding possibly occurred on the River Colne either on-site or just off-site. A summary of bird days and number of days recorded for the

last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird Days	62	122	96	51	28	34	10	2	34	21
Numbers Days Recorded	47	78	71	41	27	25	7	2	24	18

Summary: This species has shown a rather erratic pattern of occurrence at Tyttenhanger over the last 10 years as demonstrated by Figure 13. It would certainly seem that the last few years have been on the lean side – with the clear low-point of 2011 when there were only 2 records for the year! Quantitative data prior to 2004 is not available and so we will have to wait and see if this species is able to return to the levels seen in the glory-years of 2005 and 2006. The maximum on-site count is of five birds made on 7th October 2005 and on 16th October 2005.

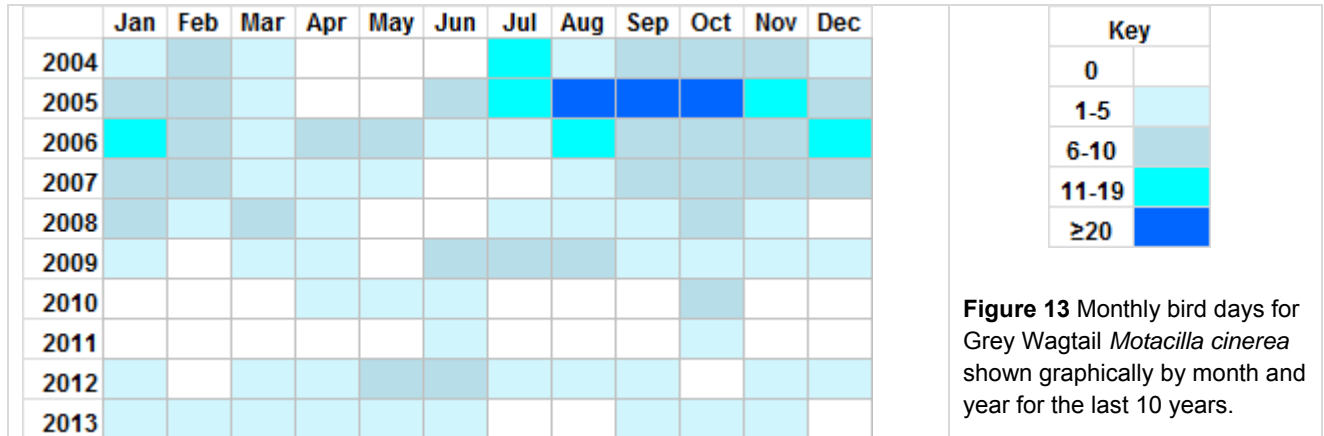


Figure 13 Monthly bird days for Grey Wagtail *Motacilla cinerea* shown graphically by month and year for the last 10 years.

White/Pied Wagtail *Motacilla alba* (10; 90)

Present through much of the year with evidence of passage in most years.

2013: Present throughout the year with a small increase in bird days and days recorded over last year, but still way down on the numbers in the period 2008-2010. Further encouragement this year came with reports of recently fledged young on the 30th June and two adults with three juveniles on the 6th July – indicating breeding on-site or close-by. There were two records of **White Wagtail** this year with one on the 13th April and another on the 26th May. A summary of data from the last 6 years is shown in the table below.

	2008	2009	2010	2011	2012	2013
Bird Days	250	349	523	184	108	137
Number Days Recorded	113	128	107	60	44	62
Maximum Count	8	18	37	37	7	20
White Wagtail Days Recorded	1	1	5	2	0	2

Summary: Quantitative data for **Pied Wagtail** prior to 2008 are currently not available – although we are working to update the electronic records for the period 2004-2007 so that we can provide a more complete picture in the future. However, of note prior to 2004 were records of 65 on the 19th August 1998 and 90 on the 3rd September 1998. Notwithstanding that older data for the resident subspecies is relatively difficult to find, there are good data for **White Wagtail** from 1986 through to the present time. The following shows the number of records per year since 1986 and demonstrates quite clearly that this migrant clearly has good and bad years.

1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
1	1	1	2	-	1 ¹⁰	2	5	3	1	5	4	5	-

2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
-	3	-	1	11	2	8	-	1	1	5	2	-	2

Interestingly of the 67 records that we have been able to assign to a month, 49 of them are in April. The earliest date recorded is the 25th March (total of 6 March records) while the latest spring data is 13th May (total of 7 May records). There are 4 records in September (three of them between 9th and 14th September 1998) and 1 in October – 9th October 2008.

Waxwing *Bombycilla garrulus* (2; 57)

Sporadic winter visitor.

2013: Not recorded.

¹⁰ The single record for 1991 comprises the statement “Seen between 15th March and 19th May”; for the purposes of the current report we have treated this as a single April record.

Summary A flock of 20 birds seen flying from Tyttenhanger Farm towards Garden Wood on 26th December 2010 at 3.20 p.m. was the first record for the site and heralded the start of a remarkable string of records that coincided with a major influx into the country. Over the weekend of the 5th March through until 8th March 2011 there were 15 individual reports of between 12 and 57 birds. The records probably represented 3 or 4 groups that were roaming the site and occasionally joining together into bigger flocks. There was then a record of 35 birds on the 11th March and finally a record of 50+ birds on the 18th March.

Wren *Troglodytes troglodytes* (10; 14)

Common breeding resident.

2013: Present in all months of the year with a maximum of 5 on the 15th April. There was evidence of breeding this year with a recently fledged bird reported on the 23rd June.

Summary: A relatively common resident that is almost certainly under-reported. Unsurprisingly the first on-site record for this species is in the 1996 Tyttenhanger Bird Report and there are no records in the Hertfordshire Bird Reports of any significance. The maximum count on-site is of 14 birds made on 24th April 2005. Surprisingly there are very few counts of 10 birds or more from the last 10 years (only 4) and all are from 2005 and 2006

Dunnoek *Prunella modularis* (10; 10)

Common breeding resident.

2013: Present in all months of the year with a maximum of 6 in January/April - but no confirmed breeding for the year.

Summary: Another of the common residents that isn't recorded on-site until the 1996 Tyttenhanger Bird Report and for which there are no records of significance in the Hertfordshire Bird Reports. The maximum on-site count is of 10 birds on the 8th April 2010 - with no other reports of 10 or more birds over the last 10 years.

Robin *Erithacus rubecula* (10; 15)

Common breeding resident.

2013: Present in all months of the year with a maximum of 7 in April, and 4 singing males also noted in April. There were recently fledged young noted on the 23rd June.

Summary: As with the previous two species this species is not recorded on-site until the 1996 Tyttenhanger Bird Report – with no records of significance in the Hertfordshire Bird Reports. Interestingly however, maximum counts for the previous two species tend to be made in the spring/early summer whereas there is a tendency for this species to peak in the autumn and winter months – maybe indicating that there may be some autumn passage/winter visitors that supplement the local residents. The maximum on-site count is of 15 birds on 15th October 2006 – with records of 10 or more birds in at least 5 of the last 10 years.

Nightingale *Luscinia megarhynchos* (0; 1)

Rare visitor.

2013: Not recorded

Summary: Maybe surprising that there is just a single record for the site of a lone bird on the 5th April 1998.

Black Redstart *Phoenicurus ochruros* (4; 2)

Infrequent passage migrant.

2013: Not recorded.

Summary: Just seven records for the site – all of which are summarised below.

1998: A female on 10 th April	2000: A female on 21 st April 2000	2004: 2 birds on 27 th October
2008: 1 on 16 th April	2010: A male on the 19 th April	2010: A male on 10 th May
	2011: A single bird on 24 th January	

Redstart *Phoenicurus phoenicurus* (7; 3)

Irregular visitor usually on spring passage.

2013: Three records for the year makes it an excellent year for this species – the best in the last 10. The first bird of the year was a male in the hedge between the main pit and Model Railway on the 15th April, there was then a female in the hedge by the Model Railway on the 19th April and the last record was another female in the Tree Sparrow hedge on the 21st April. A summary of days recorded is shown by year in the table below; of the 11 days-recorded in this period 8 were in April, 2 in October and 1 in September.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Total
Days Recorded	0	0	1	2	1	1	1	0	2	3	11

Summary: Prior to 2004 this species was recorded 10 occasions between September 1989 (a pair noted in the Hertfordshire Bird Report – but with no date) until 26th May 1999; all records are shown below.

1998: A pair noted in September	1990: Female on 24 th April 1990	1991: 3 birds on 14 th April
1993: 1 on 26 th September	1993: A single from the 2 nd to 4 th October	1994: 1 on 2 nd May
1997: 1 on 30 th April	1998: 2 on 19 th April	1999: 1 on 1 st May
	1999: 1 on 26 th May	

There is then a gap of seven years before the next record on 15th April 2006. This gap may be due to the way that data are reported in the Hertfordshire Bird Reports - except for 2004 and 2005 which are in the current reporting era and can therefore be regarded as "true" negatives. However, as Smith *et al.* (2015) have shown, the number of records in the county through this period were relatively constant and so this seems unlikely. So, it would appear that despite birds turning up elsewhere in the county throughout this time they failed to appear at Tyttenhanger.

Whinchat *Saxicola rubetra* (10; 7)

Uncommon passage migrant.

2013: Five records this year - with two in the spring and three in the autumn all of single birds. A summary of data from the last 10 years is presented below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird Days	1	9	5	4	6	16	11	9	8	5
Earliest Date*	3 rd May	30 th Apr	NS	14 th Apr	1 st May	NS	24 th Apr	8 th May	NS	19 th Apr
Latest Date*	NA	7 th Sep	10 th Sep	23 rd Sep	20 th Sep	18 th Sep	1 st Sep	9 th Sep	26 th Sep	31 st Aug
Number of Days Recorded	1	6	4	4	6	8	6	9	7	5

NS = no spring date: NA = no autumn date. *The earliest date in spring and latest date in autumn – the earliest and latest dates for the last 10 years are shaded.

Summary: As with the rest of Hertfordshire (Smith *et al.*, 2015), autumn on-site records for this elegant chat predominate. The records from the last 10 years (summarised above) indicate a median spring arrival date of 30th April and an autumn departure date of 10th September – with days-recorded distributed in roughly a 1:4 ratio for spring : autumn. Earliest and latest dates since 2004 are 14th April and 26th September respectively with a maximum count of 5 birds on the 28th August 2010. Records in the Hertfordshire Bird Reports prior to 2004 are not comprehensive as far as Tyttenhanger is concerned, but notable records include 6 on 4th September 1991, 7 on 29th August 1992 (highest on-site count), 1 on 8th October 1995 (latest recorded date) and 6 on 23rd April 1998.

Stonechat *Saxicola torquata* (10; 6)

Uncommon passage migrant and winter visitor.

2013: Another very poor year for this species with only 1 bird day for the whole year – a single bird on the 28th March! A summary of data from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird Days – First Winter Period	0	40	0	0	35	0	0	1	0	1
Bird Days – Second Winter Period	58	9	15	23	21	5	1	0	7	0
Number of Records	25	26	13	16	46	5	1	1	7	1

Summary: First recorded in the Hertfordshire Bird Reports on 5th October 1985 this is a tricky species to summarise as can be predicted from the above table! Apparently prone to massive shifts in abundance – even on a local scale - it is not clear whether the lack of reports in some years is due to good numbers elsewhere and/or just due to low numbers on-site. As there are relatively few records from the Hertfordshire Bird Reports for the period 1985-2003 we have summarised them all below – and will leave you to draw your own conclusions!

1985: 1 on 5th October.

1992: 1 on 18th October.

1995: 1-2 on several dates from 2nd October to 27th December (total 9 bird days).

1998: 2 on 19th September ; male from 20th to 22nd September.

1986: 1 in March.

1993: 1 on 23rd October.

1996: 1 bird on several dates in the 1st winter period and 1-2 birds in the 2nd winter period (total 18 bird days)

2001: 1 or 2 reported

1991: 1 on 26th October.

1994: 1 on 19th March; 1-2 on several dates from 28th Sep. to 28th October (total of 8 bird days).

1997: 2 on 27th September.

2003: 2 in both winters periods.

From the records of the last 10 years the maximum count on-site was of 6 birds on 3rd October 2004 and the monthly distribution of days recorded is shown in the table below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Number of Days-Recorded	21	22	6	2	0	1	2	0	15	32	23	16

Wheatear *Oenanthe oenanthe* (10; 30)

Regular passage migrant, more frequent in spring.

2013: A good year for this species this year with 81 bird days split between the two-migration period's 67:4; this is the greatest number of birds days for a year in the period 2004-2013 – however, forty (40) of these bird days came on just 2 days i.e. the 15th and 16th April with a maximum count for the year of 30 birds on the 15th. Unsurprisingly 30 birds is a site maximum. A summary of data from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bird Days	13	9	63	16	24	40	44	56	32	71
Bird Days Spring	13	9	58	15	5	29	29	30	30	67
Bird Days Autumn	0	0	5	1	19	11	15	26	2	4
Earliest Date*	20 th Mar	25 th Mar	25 th Mar	12 th Apr	15 th Mar	14 th Mar	20 th Mar	25 th Mar	17 th Mar	30 th Mar
Latest Date*	ND	NA	3 rd Oct	7 th Sep	8 th Oct	1 st Oct	12 th Sep	8 th Oct	4 th Oct	18 th Sep

*The earliest date in spring and latest date in autumn – the earliest and latest dates for the last 10 years are shaded.

Summary: Described in the Birds of Hertfordshire (Smith *et al.*, 2015) as “a common passage migrant” it is not surprising that there are few records specifically for Tyttenhanger in the Hertfordshire Bird Reports. However, one interesting record from pre-2004 was of a bird showing characteristics of Greenland race *O.o.leucorrhoea* noted on 4th April and 19th April. Data gathered over the last 10 years provides median arrival and departure dates of 22nd March and 2nd October respectively. Overall, spring bird days predominate in a ratio of about 7:1 – although the bias does vary considerably from year to year (see above). As previously indicated the maximum on-site count is of 30 birds (15th April 2013); interestingly there is only one other count in double figures, that of 10 birds made on the 16th April 2013!

Ring Ouzel *Turdus torquatus* (4; 2)

Infrequent passage migrant.

2013: Not recorded.

Summary: Although this species has been recorded in 3 of the last 10 years the total number of records is probably lower than this would suggest. First recorded on 27th April 1987 the following is a summary of all known records:

- 1987:** 1 male on 25th April. **1994:** 2 birds on 20th April. **1998:** Female present between 23rd April and 3rd May.
- 2000:** 1 on 8th April. **2007:** 2 males on 13th April. Single Males also recorded on 21st and 25th April. **2008:** Male present from 21st to 23rd April.
- 2010:** Male on the 19th April. **2012:** Male present from 7th to 16th April.

The above records probably relate to a minimum of 9 birds and despite the relatively low number of birds it is notable that so many of the records refer to males (6 of the 7 sexed birds). Several of the birds were long-stayers (4 of the 7 records) and all of them arrived in April – with just the long-staying female in 1998 making it into May.

Fieldfare *Turdus pilaris* (10; 600)

Common winter visitor.

2013: There were 15 counts of 50 or more birds this year (6 in 2012) with a maximum of 128 on the 28th March. The highest count in the second winter period was of 50 birds on 3 dates in December. This year also produced the very unusual record of a bird on the 5th May. A summary of monthly maxima data from the last 10 years is shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maxima 2013	100	120	128	118	1	0	0	0	0	30	20	50
Median 2004-2013*	62	96	76	3	0	0	0	0	0	25	55	50
Maximum 2004-2013*	100	307	250	118	1	0	0	0	5	100	190	100
Minimum 2004-2013*	6	24	2	0	0	0	0	0	0	1	20	13

* Median, Maximum and Minimum Monthly Maxima for each month in the period 2004-13

Summary: A regular winter visitor that was first noted on-site in the 1984 Hertfordshire bird report with the record of a flock of 300 on the 25th February. Further records up until 2004 include 250 on 10th March 1984, 300 on the 11th February 1988, 400 on the 20th January 1991, 330 on 16th February 1999, 600 on 2nd March 2003 (a record count for the site) and 250 on 13th March 2003. Monthly maxima data from the last 10 years is summarised above and demonstrate the general pattern of slightly higher numbers in the first winter period with northward moving stragglers staying into April (recorded in April in 7 out of 10 years). A summary of latest spring and earliest autumn dates is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Median
Latest Spring Date	12 th Apr	20 th Mar	8 th Apr	8 th Apr	6 th Apr	7 th Mar	27 th Mar	8 th Apr	9 th Apr	12 th May	8 th Apr
Earliest Autumn Date	9 th Oct	27 th Oct	28 th Oct	14 th Oct	30 th Oct	29 th Oct	18 th Sep	9 th Oct	27 th Oct	15 th Oct	21 st Oct

The latest spring date and earliest autumn date for the last 10 years is highlighted.

Redwing *Turdus iliacus* (10; 617)

Common winter visitor.

2013: There were six records of 50 or more birds this year (4 in 2012) including counts of 100 birds on the 27th November and 150 on the 30th November. The last record in the first winter period was of one bird on the 13th April and the first returning birds were seen on the 7th October – which is the earliest return date in the last 10 years. A summary of the monthly maxima data from the last 10 years is shown below.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Maxima 2013	50	11	30	30	0	0	0	0	0	50	150	60
Median 2004-2013*	40	49	60	0	0	0	0	0	0	35	40	16
Maximum 2004-2013*	125	200	125	50	0	0	0	0	0	617	150	60
Minimum 2004-2013*	6	9	2	0	0	0	0	0	0	4	6	2

Summary: As with the previous species this winter-thrush generally occurs in greater numbers in the first winter period – although the largest on-site count was of 617 birds on the 20th October 2012 during the autumn migration. Median arrival and departure dates are the 14th October and 27th March with earliest and latest dates 7th October and 14th April respectively.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Median
Latest Spring Date	13 th Mar	12 th Mar	14 th Apr	5 th Apr	12 th Apr	17 th Mar	29 th Mar	26 th Mar	10 th Mar	13 th Apr	27 th Mar
Earliest Autumn Date	9 th Oct	16 th Oct	21 st Oct	30 th Sep	19 th Oct	28 th Oct	9 th Oct	13 th Oct	14 th Oct	7 th Oct	14 th Oct

The latest spring date and earliest autumn date for the last 10 years are highlighted.

Blackbird *Turdus merula* (10; 20)

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

2013: Reported throughout the year with a maximum of 14 on 1st January. There were no confirmed breeding records for the year.

Summary: Unsurprisingly there is no mention of this species in the Hertfordshire Bird Reports prior to 2004 and so the first record for the site is in the Tyttenhanger Bird Report of 1996. However, it is surprising that the maximum on-site count is of just 20 birds ... on the somewhat less surprising date of 21st October 2009.

Song Thrush *Turdus philomelos* (10; 13)

Breeding resident.

2013: Present throughout the year with the usual 3–4 males appearing to establish territories around the site but again with no confirmed records of breeding. A maximum for the year of 4 birds noted in March and April.

Summary: Another of the resident breeding species for which it is relatively difficult to get a handle on its true status. Maximum counts over the last 10 years have generally ranged between 4 and 10 birds with the highest on-site count of 13 birds on 25th July 2005.

Mistle Thrush *Turdus viscivorus* (10; 125)

Breeding resident and local migrant.

2013: As usual, reported throughout the year but with high counts of just 8 on the 28th July and 6 on the 24th November the usual autumn peak failed to eventuate. Maximum counts and their dates for the last 10 years are summarized below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	54	30	21	34	30	17	29	32	24	8
Maximum Count Dates	11 th Sep	21 st Aug	27 th Aug	30 th Jul	10 th Sep	15 th Aug	4 th Oct	26 th Jul	10 th Jun	28 th Jul

Summary: One of the features of this species over the last 10 years has been the occurrence of large counts in the period from the end of July to the beginning of October (see above) and interestingly such gatherings are also a feature of records in the Hertfordshire Bird Reports prior to 2004. Notable records include 40 birds on the 19th August 1984 (first site record), 71 in July 1985, 63 on 29th July 1991 and 64 on 19th August 1991, 80 on 25th July 1992 and an on-site

record of 125 on 1st August 1996 -which is also a county record for this species. The largest count in the last 10 years was of 54 birds on 11th September 2004.

Grasshopper Warbler *Locustella naevia* (0; 1)

Infrequent visitor.

2013: Not recorded.

Summary: Unsurprisingly the majority of the records for this cryptic migrant relate to singing (reeling) birds. Unfortunately much of the data from the Hertfordshire Bird Reports are relatively non-specific and do not include dates. A summary of all available data is below.

1985: 1 in late April/early May **1987:** a reeling male in April **1988:** a reeling male reported
1996: reeling heard **1998:** reeling heard **2005:** a bird reeling on 31st May

Sedge Warbler *Acrocephalus schoenobaenus* (10; 5)

Summer visitor and breeding species.

2013: Overall numbers were slightly better this year with 35 days-recorded compared to 21 in 2012. Despite a number of singing birds in April/May there were no confirmed reports of breeding this year. The maximum count for the year was of 5 birds on the 19th May. A summary of earliest and latest dates for the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	17 th Apr	16 th Apr	14 th Apr	16 th Apr	12 th Apr	11 th Apr	7 th Apr	8 th Apr	13 th Apr	15 th Apr
Latest Date*	7 th Aug	10 th Sep	11 th Aug	11 th Aug	6 th Sep	12 th Sep	31 st Aug	29 th Aug	21 st Aug	17 th Sep

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted.

Summary: First recorded in the Hertfordshire Bird Report of 1984 when there were “pairs” noted on-site, there are several further records for this species prior to 2004. Most of these records refer to singing birds and were reported in 1985, 1986, 1987, 1998, 2000 and 2003. From 2004 onwards there have usually been 3-4 singing males present in most years but with confirmed breeding in only 2 of those ten years. Spring arrival dates have been relatively consistent in this last ten years with a median of 13th April, however, autumn departure dates are a little more variable and have a median of 30th August. The maximum count on-site is of 5 birds on a number of occasions in 2008, 2010 and 2013.

Reed Warbler *Acrocephalus scirpaceus* (10; 8)

Summer visitor and breeding species.

2013: Numbers were slightly up this year with a maximum of 8 birds on the 26th May – which equals the maximum on-site count (also made on 27th July 2010). Breeding was confirmed this year with recently fledged young noted on the 27th July. A summary of earliest and latest dates for the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	3 rd May	6 th May	19 th Apr	23 rd Apr	26 th Apr	29 th Apr	24 th Apr	10 th Apr	20 th Apr	16 th Apr
Latest Date*	14 th Aug	19 th Aug	12 th Sep	9 th Sep	15 th Aug	5 th Sep	7 th Aug	19 th Sep	28 th Sep	6 th Aug

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted.

Summary: First recorded in the Tyttenhanger Bird Report of 1996 there are few further records in the Hertfordshire Bird Reports prior to 2004. The notable records comprise a single bird on the 7th April 1997 (earliest site record) and evidence of established territories in 2000, 2002 and 2003. From 2004 onwards the area of reed-bed on-site has gradually increased and this species appears to go from strength to strength. With several pairs establishing territories every year there have now been confirmed breeding in 5 of the last 10 years. Breeding aside, median spring arrival and autumn departure dates over the last 10 years are 23rd April and 27th August. Earliest and latest dates are the 7th April (1997) and 28th September (2012).

Blackcap *Sylvia atricapilla* (10; 10)

Common summer visitor and breeding species.

2013: The first bird of the year was on the 14th April - which is the latest spring arrival date for the period 2004 – 2013. Otherwise it was a fairly typical year for this species, recorded on 46 days with a maximum of 8 birds on the 18th April. There was also a report of single fledgling on the 22nd June. A summary of earliest and latest dates for the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	11 th Apr	28 th Mar	28 th Mar	12 th Apr	10 th Apr	3 rd Apr	1 st Apr	30 th Mar	30 th Mar	14 th Apr
Latest Date*	4 th Sep	3 rd Oct	17 th Sep	9 th Sep	6 th Oct	1 st Oct	30 th Sep	2 nd Oct	30 th Oct	6 th Oct

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted.

Summary: First recorded on-site in the Tyttenhanger Bird Report of 1996 there are no further records available until 2004. Data from the last ten years shows median spring arrival and autumn departure dates of 2nd April and 1st October respectively, with a maximum on-site count of 10 birds on the 19th April 2011. Interestingly, 2006 is the only year that an over-wintering bird has been recorded in the period 2004 – 2013 with a single bird seen on Colney Heath Common on the 10th December.

Garden Warbler *Sylvia borin* (10; 5)

Regular summer visitor.

2013: Thirty-two days-recorded for the year is nearly twice that of last year (17). The first bird of the year on the 23rd April and fourteen of the days-recorded involved two or more birds with a maximum of 4 birds on two dates. There was confirmed evidence of breeding this year with a bird seen carrying a faecal sac on the 26th June. All in all it was a very good year for this species on-site. A summary of earliest and latest dates for the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	15 th May	30 th Apr	5 th May	29 th Apr	26 th Apr	25 th Apr	25 th Apr	17 th Apr	5 th May	23 rd Apr
Latest Date*	13 th Aug	16 th Aug	22 nd Aug	20 th May	30 th May	2 nd Sep	17 th Sep	13 th Aug	25 th Aug	28 th Jul

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted.

Summary: First recorded in the Tyttenhanger Bird Report 1996, as with several other warbler species, there are then no further records available until 2004. Analysis of the data collated during the last 10 years shows that this species has a median spring arrival date of 27th April and an autumn departure median of 19th August. The maximum count on-site is of just 5 birds made on 1st May 2011 and 21st July 2012.

Lesser Whitethroat *Sylvia curruca* (10; 4)

Frequent spring migrant/summer visitor. Breeding status uncertain.

2013: Six records for the year - all of single birds - is slightly down on the last couple of years (9 in 2011) and 8 in (2012). And is also the lowest number of days-recorded in the last 10 years. A summary of earliest and latest dates for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	24 th Apr	29 th Apr	23 rd Apr	23 rd Apr	26 th Apr	15 th Apr	3 rd May	21 st Apr	2 nd May	21 st Apr
Latest Date*	3 rd Jun	14 th Aug	7 th July	14 th Sep	29 th Aug	22 nd Aug	1 st Sep	24 th Jul	25 th Aug	27 th Jun

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted

Summary: Unlike many of the other common warblers the first record for the site of this species is in the Hertfordshire Bird Report of 1987 when 4 birds were noted to be singing on site; however, other records from that source are relatively rare. Over the last 10 years this species has been a regular - if erratic - summer visitor as shown in the tables above and below. The median spring arrival date over this period is the 23rd April and median autumn departure date is 18th August. Interestingly although recorded on over 100 days since the 24th April 2004 there are only two records from September – 14th September 2007 and 1st September 2010. The maximum on-site count is of just 4 birds on 25th August 2010.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	7	12	16	12	9	19	11	9	8	6
Bird Days	7	13	20	18	11	22	15	9	13	6

Whitethroat *Sylvia communis* (10; 20)

Common summer visitor and breeding species.

2013: This species remains the most common warbler on site, with a maximum of 10 birds noted this year on the 6th May. Breeding was confirmed this year with recently fledged young reported in June and July. A summary of earliest and latest dates and maximum counts for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date	17 th Apr	10 th Apr	15 th Apr	15 th Apr	17 th Apr	4 th Apr	17 th Apr	8 th Apr	16 th Apr	15 th Apr
Latest Date	19 th Sep	3 rd Sep	8 th Sep	2 nd Oct	25 th Sep	18 th Sep	4 th Sep	4 th Sep	30 th Aug	24 th Sep
Maximum Count	10	10	15	20	14	14	9	19	14	10

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted

Summary: Unlike several of the other common warblers, the first record for this species on-site is not in the Tyttenhanger Report of 1996 but is in the Hertfordshire Bird Report of 1984 - when 4 birds were noted to be singing on site; further records up to the beginning of 2004 are, however, relatively scarce. Data from the last 10 years provides a median arrival date of 15th April and median departure date of 10th September. The best counts were of 20 birds on the 11th May and 9th June 2007

Dartford Warbler *Sylvia undata* (1; 1)

Rare visitor

2013: Not recorded.

Summary: The only record is of a first winter bird moulting into first summer plumage that was found on the 11th February 2006 - after being flushed by a dog! First located adjacent to the drive to Tyttenhanger House it was later relocated in the afternoon along the fence-line of the Amazing Maize field where it stayed for the rest of the day.. Smith *et al.*, (2015) have speculated that this may have been the same bird that was at Essendon Golf Course between 9th November 2005 and 1st January 2006.

Wood Warbler *Phylloscopus sibilatrix* (0; 1)

Rare visitor

2013: Not recorded.

Summary: The only record is of a single bird on the 29th August 1994 although interestingly there have been subsequent claims of other birds – none of which have been substantiated by publication in the Hertfordshire Bird Reports.

Chiffchaff *Phylloscopus collybita* (10; 11)

Common summer visitor and breeding species.

2013: The first bird of the year was on the 28th March and the last on the 19th October; the maximum count for the year was of 11 birds (the most in the period 2004- 2013) noted on both the 14th and 17th September. However, there were no confirmed breeding records this year. A summary of earliest and latest dates for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	17 th Mar	19 th Mar	31 st Mar	17 th Mar	15 th Mar	15 th Mar	17 th Mar	13 th Mar	12 th Mar	28 th Mar
Latest Date*	30 th Oct	14 th Oct	12 th Oct	7 th Oct	2 nd Nov	21 st Oct	6 th Oct	12 th Nov	30 th Oct	19 th Oct

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted

Summary: First recorded in the Tyttenhanger Bird Report of 1996 there are few other data available until 2004 and the start of the current series of annual reports. Data from the last 10 years has produced a median spring arrival date of 17th March and an autumn departure median of 20th October. There are also a number of winter records from the last 10 years with up to 2 birds present in early 2005, 2 in late 2009 and a single bird on 5th December 2010.

Willow Warbler *Phylloscopus trochilus* (10; 8)

Common summer visitor and breeding species.

2013: The number of days recorded increased to 22 this year compared to just 13 in 2012 - but despite this increase a maximum of only 2 birds were recorded on three dates in April. The only sign of breeding this year was of 2 birds building a nest on the 28th April. A summary of earliest and latest dates for the last 10 years are shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Earliest Date*	9 th Apr	28 th Mar	2 nd Apr	6 th Apr	10 th Apr	3 rd Apr	30 th Mar	26 th Mar	12 th Apr	15 th Apr
Latest Date*	29 th Sep	11 th Sep	25 th Sep	9 th Sep	21 st Sep	18 th Sep	7 th Oct	5 th Sep	3 rd Sep	28 th Aug

*The earliest date in spring and latest date in autumn - the earliest and latest dates for the last 10 years are highlighted

Summary: First noted in the Hertfordshire Bird Report of 1990 this record was of a bird found on the 18th March – which is the earliest recorded date for the site! Additional records prior to 2004 are relatively scarce but the breeding atlas data summarised in Smith *et al.* (2015) shows this species declining rapidly in the county between 1992 and 2008. Likewise,

data from the last few years has seen this species decline further on-site – albeit there seems to have been a slight recovery this year. The median arrival and departure dates from the last 10 years are 4th April and 14th September respectively and the highest count on-site is of 8 birds on the 28th April 2010.

Goldcrest *Regulus regulus* (10; 10)

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

2013: Small numbers reported in most months this year with recently fledged young noted on the 20th August in Garden Wood. The maximum count for the year was of just 2 birds on several dates through the year.

Summary: Generally present throughout the year – usually around the Water Works and in Garden Wood – it is probably under recorded and more common than the available records would indicate. Often absent in May/June/July there are however, occasional breeding records from the last 10 years. Surprisingly the largest count is of just 10 birds made on 15th January 2005.

Firecrest *Regulus ignicapillus* (1; 1)

Rare visitor

2013: The first bird since 1996 was found on the 10th April next to the Horse paddocks on Colney Heath (David Booth).

Summary: There are a total of three records including the one from this year with the others being of a (probable) female on the 22nd March 1987 and a single bird 7th April 1996.

Spotted Flycatcher *Muscicapa striata* (10; 6)

Declining passage migrant; has bred in the past years.

2013: This is the third year in a row that there have been just two records; the first bird was on the 14th September and the second on the 17th September (possibly the same bird). Both records were from Garden Wood.

Summary: Surprisingly, the first record for this species is in the Tyttenhanger Bird Report of 1996. However, on closer inspection this is may not be quite so surprising when its status prior to 1996 is taken into account when it was a relatively common breeding species in Hertfordshire (Smith *et al.*, 2015). Since 1996 it has become a much scarcer breeding visitor and has disappeared as a breeding species from many parts of the county – including Tyttenhanger in the more recent past. Breeding on-site was confirmed in 1998, 2001, 2005, 2006, with birds also present in the breeding season in 1999. The last 10 years has seen a total of 49 days recorded – and a total of 70 bird days. Spring arrival dates are rather erratic and autumn records tend to dominate with the majority of the 49 days recorded in August (14) and September (17). The median autumn departure date over the last 10 years is 9th September and the latest date was 25th September 2008. The earliest spring arrival date is the 10th May 2006 and the maximum count was of 6 birds (2 adults 4 young) on 3rd September 1998.

Pied Flycatcher *Ficedula hypoleuca* (2; 1)

Rare visitor.

2013: One seen in Garden Wood on the 27th August (Steve Blake and David Booth) was the third record for the site.

Summary: Only 3 records for the site all of which are summarised below:

1998: 1 on 4th September

2010: 1 on 16th September

2013: 1 on 27th August

Long-tailed Tit *Aegithalos caudatus* (10; 30)

Common resident and breeding species.

2013: Reported throughout the year with a maximum of 15 on the 18th August. Breeding was noted this year with a family party seen on the 20th July.

Summary: Frequently observed on site and often in flocks of 10 or more birds. Unsurprisingly, the first record for the site is in the 1996 Tyttenhanger Bird Report with little else available until 2004. The maximum count on-site is of 30 birds on the 28th June 2011.

Blue Tit *Cyanistes caeruleus* (10; 50)

Common resident and breeding species.

2013: Present throughout the year with a maximum of 17 on the 1st January. Breeding was confirmed with a couple of family parties and recently fledged young seen in June and July.

Summary: One of our common residents that is invariably present on most site visits, although it is generally under-recorded – and definitely under-counted! First recorded in the Tyttenhanger report of 1996; the maximum count on-site is of 50 birds which was made on 30th December 2006 and 5th August 2010.

Great Tit *Parus major* (10; 50)

Common resident and breeding species.

2013: Present throughout the year with a maximum of 18 on 1st January. Breeding was confirmed this year with a family

party noted in June.

Summary: Another of our common residents that is probably under-reported and for which there are few records available prior to 2004. First recorded in the Tyttenhanger report of 1996; the maximum count on-site is of 50 birds which was made on 30th December 2006.

Coal Tit *Periparus ater* (10; 3)

Resident and probable breeding species.

2013: Eighteen records (11 in 2012) is a relatively good year for this species - with a maximum of 3 birds on the 17th September. There were no breeding records this year.

Summary: First recorded in the Tyttenhanger Bird Report of 1996 there are few records of this species prior to 2004. Smith *et al.* (2015) indicates that this species has shown a slight increase in breeding numbers since the first atlas in 1967-73 and records from Tyttenhanger in the last 10 years – summarised below - show that while numbers are relatively constant, that the number of days recorded can vary quite dramatically between years. Surprisingly the maximum count on-site is of just 3 birds made on a number of dates between 2006 and 2013.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	12	29	27	13	20	17	37	18	11	18
Maximum Count	2	2	3	3	2	2	3	3	2	3

Willow Tit *Poecile montanus* (0; 2)

Rare visitor.

2013: Not recorded.

Summary: A pair noted in the breeding season of 1991 in the Hertfordshire Bird report is the only record for this species. The loss of this species as a breeding species in Hertfordshire (and much of the UK) over the last 20 years (Smith *et al.* 2015) means that it is highly unlikely that it will be recorded on-site in the near future.

Marsh Tit *Poecile palustris* (5, 2)

Previous resident and probable breeding species. Not reported since 2010.

2013: Not recorded.

Summary: A species that appears to have declined dramatically on-site in the 10 years - since we started producing an annual report - and has not been recorded since 2010. Prior to 2004 there are relatively few records for the species and include just the following from the Hertfordshire Bird Reports:

1990: Pairs noted in the breeding season.

1992: A bird displaying

2001: 1 bird reported

The majority of the records from 2004 -2010 are from Coppice Wood (18 of 23) with a couple of records from the Model Railway and single records from Tyttenhanger House, Garden Wood and an unspecified location. One of the editors routinely surveyed Coppice Wood between 2004 and 2007 and the results of those visits are shown below. Across this period the species obviously had its hey-day in late 2004-early 2006 and had a recording frequency of around 31% in 2005 but of only 12.5% across the whole 2004-2007 period.

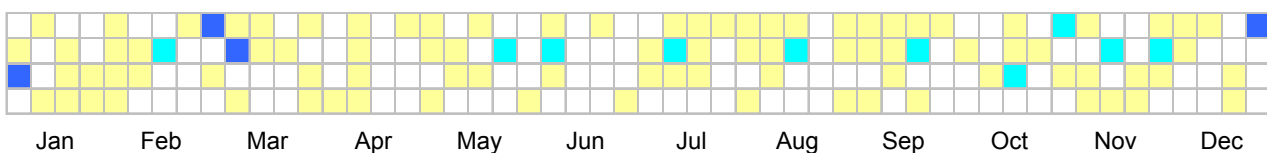


Figure 14: Temporal distribution of Marsh Tit (*Poecile palustris*) records from Coppice Wood for the years 2004 (top) to 2007 (bottom). Key: ■ = Species not recorded, ■ = 1 bird, ■ = 2 birds.

Given the general decline of this species in the county (Smith *et al.*, 2015) and the recent lack of numbers it appears unlikely that the species will make a return in the near future. However, as previously seen, this species did have a preference for the woodlands on the western edge of the site - which probably bear more attention than they have received in the recent past.

Treecreeper *Certhia familiaris* (10; 3)

Common resident and probable breeding species.

2013: Reported in only 7 months of the year with 2 adults with 1 young bird seen on the 23rd July being evidence of breeding on-site (or close by) and also the maximum count for the year.

Summary: First recorded in the Tyttenhanger Bird Report of 1996. With relatively few additional records prior to 2004, the last 10 years has seen the species recorded on around 130 days – with most years managing 12 or more days-recorded but with the obvious low points of 2009 and 2012 (see table below). The maximum count on site is of just 3 birds on a number from dates from 2005, 2006, 2012 and 2013.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	18	17	20	12	19	5	12	12	7	10

Nuthatch *Sitta europaea* (10; 4)

Common resident and probable breeding species.

2013: Reported in 8 months of the year with a maximum of three birds on the 27th March. No breeding records this year.

Summary: First recorded in the Hertfordshire Bird Report of 1986 there are relatively few records for this species prior to 2004. Since 2004 the species has been recorded on more than 250 days across the 10 years with a maximum count of 4 birds on the 18th December 2004. The monthly distribution of days-recorded is shown on the right and demonstrates that there is a clear spring peak in March, a trough in May/June and then an autumn peak in September.

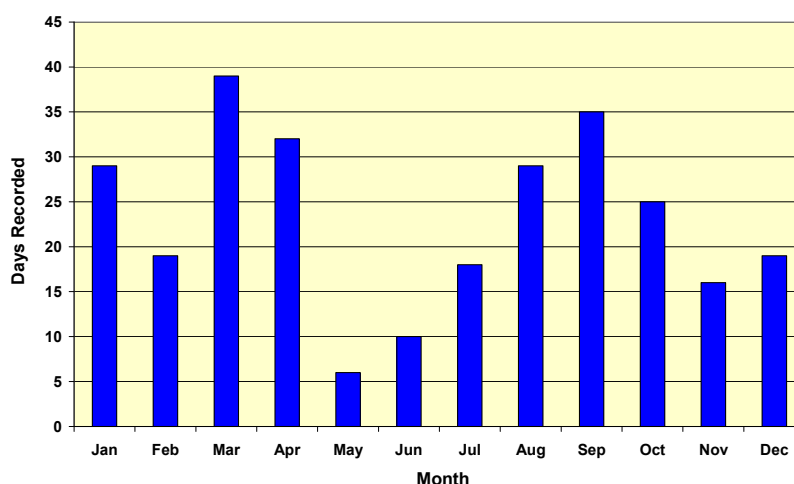


Figure 15: Distribution of days-recorded by month for Nuthatch *Sitta europaea* for the period 2004-13.

Red-backed Shrike *Lanius collurio* (0; 1)

Rare visitor.

2013: Not recorded.

Summary: An immature on 31st August 1996 is the only record for the site.

Jay *Garrulus glandarius* (10; 15)

Common resident.

2013. Reported in all months throughout the year with a maximum count of 4 birds on three dates – one each in January, April and September. There were no records of passage this year and no breeding noted.

Summary: First recorded in the Tyttenhanger Bird Report of 1996, unsurprisingly there are few other records prior to 2004. Records from the last 10 years have shown that the species is generally present throughout the year in small numbers and counts of 10 birds or more are restricted to autumn 2012 i.e. 15 (record on site count) on 22nd September, 10 on 29th September, 12 on 20th October and 10 on the 30th October.

Magpie *Pica pica* (10; 55)

Common resident.

2013: Present throughout the year with a maximum of 22 on 21st April. A nest was reported on the 24th May but no other information was received.

Summary: First recorded in the Hertfordshire Bird Report of 1992 when 55 birds were noted on the 5th March (record on-site count) there are several other notable counts: 33 on 29th December 1997, 34 on 7th January 1998 and 41 on the 6th January 1999. Records from the last 10 years indicate this species has retained a fairly stable population on site and is generally present throughout the year -although surprisingly there are few confirmed breeding records. The maximum on-site count in the last 10 years was of 36 birds on the 1st January 2012.

	Maximum count for the Year									
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Magpie	19	26	24	22	16	21	28	29	36	22
Carrion Crow	50	150	250	150	107	50	40	74	44	70
Rook	41	108	68	67	30	74	21	40	117	80
Jackdaw	200	175	500	322	300	200	60	50	280	100

Carrion Crow *Corvus corone* (10; 250)

Common resident.

2013. Present throughout the year with a maximum of 70 on the 30th November. A summary of maximum yearly counts is shown in the table above.

Summary: First recorded in the Hertfordshire Bird Report of 1988 when 44 birds were noted on the 22nd October there are few other records until 2004. Numbers on-site in the last 10 years have tended to be a bit up and down as indicated by the table above with the maximum on-site count being of 250 birds on the 3rd December 2006.

Jackdaw *Corvus monedula* (10; 500)*Local breeder and common visitor to the site.***2013:** Present throughout the year with a maximum of 100 on the 6th December.**Summary:** First recorded in the Tyttenhanger Bird Report of 1996 there are no other records until the current era. Counts from the last 10 years have shown the species peak in numbers in 2006-07 and reach its lows in 2010-11. The maximum count on-site was of 500 birds on the 3rd December 2006.**Rook *Corvus frugilegus* (10; 117)***Local breeder and relatively common visitor to the site.***2013:** Present through much of the year with a very obvious gap in records between June and October. The maximum count for the year was of 80 birds on 1st January.**Summary:** First recorded in the Tyttenhanger Bird Report 1996 there are no other records available until 2004. Data from 2004 onwards shows this species is a relatively common visitor - with a large number of records relating to birds flying over. The maximum count on-site was of 117 birds on 28th December 2012.**Raven *Corvus corax* (3; 2).***Infrequent visitor.***2013.** Three records for this species is the best year on record and constitute the 4th, 5th and 6th records for the site. Records for the year comprise two birds that flew over Garden Wood on the 13th April (Rupert Pyrah); two flying northeast on the 12th October (Tony Wileman) and then a single bird flying over the Model Railway/Water Works on the 30th December (Alan Gardiner). Hopefully such a sharp increase in records may indicate another local expansion in breeding range?**Summary:** A species that undoubtedly occurred in the distant past but was not recorded in the recent past until 2009. The previously reported record of 4 birds in 2006 would have required a description at that time as the species was only removed from Hertfordshire rare Bird Panel reporting requirements in 2007. As this record has not been recorded in the 2006 or any subsequent reports is now considered to be unproven. This means that the first record on-site was of a pair flying over the fishing lake on 19th April 2009. Subsequent records involved 2 birds flying over on 16th April 2011 and 1 on the 1st May 2011. Interestingly of the 6 records to date 4 have involved 2 birds and 4 have been in April.**Starling *Sturnus vulgaris* (10; 10000)***Common resident and winter visitor.***2013:** Reported throughout the year with a maximum of 250 on the 18th August. Recently fledged young were noted on the 23rd June – surprisingly one of the few breeding records on-site.**Summary:** First recorded in the Hertfordshire Bird Report of 1988 when an astounding 10,000 birds were recorded in August – unsurprisingly a record on-site count. High counts appear to have been a feature in the late 1980s early 1990s as 8000+ birds were recorded on the 30th July 1990 and 3000+ in November 1995. Records from 2004 onwards show considerably lower numbers than above, although larger flocks tend to occur on-site from about August through until the end of the year – with most years producing counts in excess of 200 birds (see Table below).

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	300	200	400	300	220	200	300	400	500	250

Tree Sparrow *Passer montanus* (10; 100)*Breeding resident and frequent visitor from other local breeding populations.***2013:** In some respects another relatively poor year for this species, with no double figure count for the year and a maximum of just 7 birds on 27th November. Birds were reported in 7 months of the year but this was really a year of two parts with the first half of the year providing only 3 of the 40 records for the year. The second half of the year saw small numbers of birds on multiple days in October (4), November (21) and December (11).**Summary:** First recorded in the Hertfordshire Bird Report of 1983 with a count of 100 birds on the 5th November., there are a number of subsequent records in the reports. These records include counts of 100 on the 19th January 1985 and 40+ on the 25th October 1986 but after this numbers are generally much lower and refer mostly to occasional breeding records (1987, 1988, and 1998) and counts in single figures. However, as indicated in Smith *et al*, (2015) feeding stations were established in the area in 2001/2002 and numbers began to increase e.g 20 on 15th December 2001 and 1st January 2002. As Smith *et al*, (2015) also show, through the period 1992-2008 the Tyttenhanger area also became the last remaining breeding site for the Tree Sparrow in Hertfordshire (which clearly justifies its continuing position as our cover-bird!). Previously widely distributed in the county – and indeed much of southern England – its decline since the late 1960s has been dramatic and has left the local breeding population pretty much as an island in the home counties area, and now heavily dependent on the feeding stations and nest boxes provided by the Herts Bird Club and its sponsors.

The provision of direct support for the local populations has generally meant quite healthy populations in the area over the last decade or so, as the following figure of relative monthly maxima for the site shows. However, despite this support there is also an indication of a decline over the last few years from the apparent peak of 2004-2006. It is possible that this decline on-site is due to the introduction of a second feeding station on Coursers Road as it has been noted that the local population has been holding its own in the general area over the recent past (Smith *et al.*, 2015).

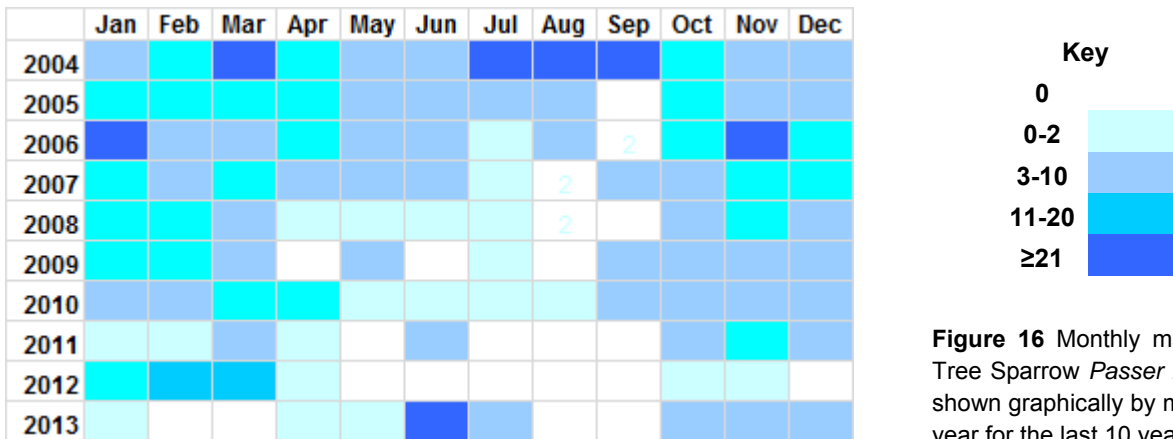


Figure 16 Monthly maxima for Tree Sparrow *Passer montanus* shown graphically by month and year for the last 10 years.

The following table summarises much of the data from the last 10 years and like the above figure appears to indicate that there has been a decline on site in the last few years – if not in the number of records then at least in terms of the number of birds involved.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded	90	84	89	93	76	62	98	63	37	41
Counts of 10 or more	24	18	13	9	9	4	3	2	2	1
Maximum count	41	20	25	20	18	14	10	12	13	28

House Sparrow *Passer domesticus* (10; 36)

Small resident populations around Willows Farm and in Colney Heath.

2013: Reported in very small numbers throughout the year with a maximum of 6 birds on several dates. This maximum is the lowest in the period 2004-13.

Summary: Unsurprisingly, first recorded in the Tyttenhanger Bird Report of 1996 this species is probably overlooked and under-reported. Data from the last 10 years indicates that while always present in the usual locations (Willows Farm and Colney Heath) it may be subject to year-to-year fluctuations as indicated by the table below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	11	15	36	29	14	20	15	20	18	6

Hawfinch *Coccothraustes coccothraustes* (1; 2)

Rare visitor

2013: Not recorded.

Summary: Two along the River Colne just upstream from Willow's Farm on 6th April 2011 (Simon West) were the first and only record for the site.

Chaffinch *Fringilla coelebs* (10; 200)

Common resident and breeding species with winter flocks commonly noted.

2013: Five counts of 20 or more birds this year (9 in 2012) with three in the first winter period and two in the second winter period. The maximum count for the year was of 79 birds on the 9th February. There were no confirmed records of breeding this year.

Summary: First recorded on-site in the 1991 Hertfordshire Bird Report when 100 birds were seen at Willows Farm (then Bowmans Green Farm) on the 15th December, there are few further records until 2004. In the last 10 years it has been noted that several birds establish territories around the site each year – but confirmed records of breeding are rare. Winter flocks are undoubtedly the outstanding feature for this species and as the following table shows, numbers can be quite substantial. The maximum count on site is of 200 birds on the 29th January 2003 and 28th December 2012.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Counts of 20 or more	NA	1	8	14	8	12	16	8	8	6
Maximum Count	40	50	45	80	110	150	150	150	200	79

NA = data currently not available as e-records are being updated.

Brambling *Fringilla montifringilla* (8; 9)*Regular/irruptive winter visitor.***2013:** Not recorded.**Summary:** As would be expected for an irruptive visitor occurrence can tend to be erratic! Records for the site go back as far as 1991 when single birds were recorded in March and October – all records prior to 2004 are summarised below:**1991** 1 in March and 1 on 27th October**1999** 1 in March**2001** 1 on 21st January**2002** 1 or 2 birds in January/ February and 1 to 4 in March

After 2004 data are more comprehensive and as the following table shows, numbers and days recorded between years fluctuate quite substantially. The last two years have produced no records at all and indeed the last record was on the 24th January 2011!

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Birds Days	8	9	8	46	9	1	29	4	0	0
No Days Recorded	4	8	7	13	5	1	16	2	0	0
Latest Date (Spring)	5 th Apr	13 th Apr	NS	NS	3 rd Feb	2 nd Jan	8 th Feb	24 th Jan	NS	NS
Earliest Date (Autumn)	NA	23 rd Oct	15 th Oct	9 th Nov	3 rd Nov	NA	10 th Nov	NA	NA	NA

NS = no spring date; NA = no autumn date.

The last 10 years has seen this species recorded on 56 days for a total of 114 bird days with a maximum count of 9 birds on 15th December 2007. Interestingly, despite the variability between years there is a very obvious peak in the timing of records across the 10 years with a large proportion of records being from November i.e. 23 of the 56 days recorded.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days Recorded 2004-13	8	4	1	3	0	0	0	0	0	3	23	14

Greenfinch *Carduelis chloris* (10; 100)*Common resident and probable breeding species.***2013:** Reported in small numbers throughout the year with a maximum of 6 birds on the 16th January. Despite several males establishing territories around the site there were no confirmed breeding records again this year.

Summary: First recorded in the 1996 Tyttenhanger Bird Report there are few other records for this species prior to 2004. Over the last 10 years there have been several pairs that have established territories around the site each year but without any confirmed breeding records. Maximum counts tend to be in the autumn/winter months, although as the table below shows maximum counts can vary quite considerably between years. The maximum count was of 100 birds on 22nd November 1985 (Brew, 1997), the best count in the last 10 years is of 70 birds on the 2nd November 2011.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	25	37	50	8	25	21	50	70	4	7
Count Date	15 th Feb	11 th Feb	5 th Sep	25 th Mar	8 th Nov	19 th Dec	27 th Nov	2 nd Nov	SDs*	18 th Aug

* Indicates the same count was made on several days.

Goldfinch *Carduelis carduelis* (10; 100)*Common resident and probable breeding species.***2013:** Reported throughout the year with a maximum of 89 birds on the 18th August – which is the largest on-site count for the period 2004-13. Breeding on-site or near-by was indicated by the presence of dependent young in July.

Summary: First recorded in the Hertfordshire Bird Report of 1984 when 70 birds were seen on the 30th September, there are relatively few additional records until 2004. Records from the last 10 years indicate that this species can occur in significant numbers (≥ 24) in any month from July through to March. Nevertheless, the majority of these counts tend to be between August and October with the maximum on-site counts being of 100 birds on 6th August 1993 - and in the last 10 years of 89 birds on 18th August 2013.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count	30	32	30	30	26	37	52	32	50	89
Count Date	28 th Nov	30 th Jul	SDs*t	07 th Jan	3 rd Oct	21 st Oct	11 th Jan	11 th Mar	27 th Aug	18 th Aug

* Indicates the same count was made on several days.

Lesser Redpoll *Carduelis cabaret* (10; 80)*Regular winter visitor.*

2013: Another excellent year for this species and after the 36 records last year there were 49 records this year. In the first winter period there were 38 records, starting with 4 birds on the 1st January and finishing with 7 birds on the 23rd April. In the second winter period there were 11 records, starting with a single bird on the 19th October and the last bird of the year on the 14th December. Amongst the 49 records there were 30 counts of 10 or more birds - all in the first winter period - with a maximum of 28 birds on the 12th February. A summary of data from the last 10 years is shown below.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days Recorded – 1st WP*	1	3	20	3	3	1	3	8	18	38
Days Recorded – 2nd WP*	0	14	0	4	0	0	1	7	18	11
Maximum Count	1	15	7	4	2	1	6	10	20	28

*WP = Winter Period

Summary: First recorded in the Hertfordshire Bird Report of 1994 with a count of 80 birds on the 9th January– which is also the largest ever count on-site. Records from then until 2004 are relatively few and far between with single birds recorded in 1995, 1998 and 2003 and the significant records of 25 on the 11th October 1997 and a bird on the 13th May 1998 (the only May record). The last 10 years has much more regular reporting and this species has been recorded on a total of 153 days – with an almost 2:1 ratio of 1st: 2nd winter periods. Latest spring date in the last 10 years was 23rd April 2013 and the earliest autumn date the 14th October 2005.

Mealy Redpoll *Carduelis flammea* (3; 3)*Irregular visitor.***2013:** No records.

Summary: The first record was of a single bird on the 11th October 1998 which was followed just over six years later by two birds on the 26th February 2005. The next time the species appeared on-site was on the 7th January 2006, which was the herald of a remarkable run of records up until the 6th February, when between 1 and 3 birds were seen frequently around the river next to Willows Farm. There were two further records in 2006 of single birds on the 17th February and 19th March before the last record - just over 5 years later - on the 20th March 2011. In total the species has been recorded on 16 days with a maximum count of 3 birds made on 18th January 2006.

Crossbill *Loxia curvirostra* (1; 4)*Rare visitor.***2013:** Not recorded.

Summary: A total of three records for the site – including just a single record in the last 10 years. All records are summarised below.

1991: 2 on 27th October.**1998:** 4 over Coppice Wood on 22nd March.**2005:** A single bird over Garden Wood on 10th July.**Siskin** *Carduelis spinus* (10; 120)*Frequent winter visitor - usually along the River Colne at Colney Heath.*

2013: A bad year for this species with only 4 records divided equally across the two winter periods. The 4 records are 1 on the 13th March, 2 in Garden Wood on the 27th March then 1 on the 2nd November and 9 on the 11th December

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
1st Winter Period Days	6	6	11	1	9	7	5	9	3	2
Latest Spring Date	23 st Feb	5 th Mar	10 th Apr	27 th Jan	7 th Mar	28 th Mar	6 th Mar	12 th Mar	3 rd Mar	27 th Mar
2nd Winter Period Days	3	11	2	4	11	5	5	8	5	2
Earliest Autumn Date	28 th Nov	14 th Sep	11 th Nov	4 th Oct	21 st Sep	18 th Oct	17 th Oct	1 st Oct	14 th Oct	2 nd Nov
Maximum Count	100	100	40	11	100	120	80	60	60	9
Maximum Count Date	5 th Jan	24 th Dec	7 th Jan	19 th Dec	30 th Sep	12 th Dec	11 th Dec	5 th Nov	20 th Oct	11 th Dec

Summary: This species has proved rather difficult to monitor over the years as records from the Colney Heath end of the recording area are quite often missed as they are not assigned to Tyttenhanger GPs. We are currently in the process of going back over the available records for the last 10 years to more accurately collate them all. Records prior to 2004 are relatively thin on the ground and the only significant records are of 40 birds on January 1st 2002 and 30 in November of that same year. The currently available records of the last 10 years are summarised above – although this should probably be looked upon as a work in progress.

Linnet *Carduelis cannabina* (10; 350)

Common resident and breeding species; large winter flocks often present.

2013: Reported throughout the year with a maximum of 34 on the 9th February in the first winter period and 120 on the 18th August in the second winter period. There were only two counts of 50 or more birds this year (10 in 2012).

Summary: First recorded in the Hertfordshire Bird Report of 1983, unlike many of our commoner birds there are a number of other records available prior to 2004. Most of these records involve large counts and as indicated by records from the last 10 years counts of ≥ 70 birds can be considered significant. The Hertfordshire Bird Reports from 1983 through to 2003 contain 18 references to counts of ≥ 70 birds with five counts of 200 or more birds and a record on-site count of 350 birds on 22nd September 1985. The last 10 years has shown this is a species that can occur in significant numbers any time from August through until March with 20 counts of over 70 birds and a best count of 200 birds on 2nd January 2010.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Maximum Count – 1st WP*	60	40	70	6	5	25	200	70	24	34
Maximum Count – 2nd WP*	100	100	30	30	50	104	80	64	94	120

*WP = Winter Period

Bullfinch *Pyrrhula pyrrhula* (10; 12)

Resident, probably breeds.

2013: Reported in all months except September with a maximum of 3 birds on the several dates through the year. The recording frequency for this species (7 records from 61 visits by one regular observer) showed a substantial drop this year from the recent high of 2012 – see table below – which was enough to take it below the median for the last 10 years (12.6%).

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Recording Rate	22.4%	28.4%	13.6%	7.8%	6.1%	8.2%	11.6%	14.6%	26.1%	11.5%

Summary: There are no on-site records until the Tyttenhanger Bird Report of 1996 where this species is noted as “resident”. Subsequent to this the Hertfordshire Bird Reports provide records of 12 birds on the 16th November 1996 (a record on-site count) and 9 birds on the 21st December 2002. The last 10 years has demonstrated (see table above) that this species is subject to rather rapid fluctuations in reporting frequency which may well represent its relative local breeding success. Further analysis of data from the last 10 years (recorded on a total of 219 days) shows that June records are relatively rare and that the most productive months are December and January.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Days Recorded 2004-13	32	21	19	18	16	4	21	13	9	10	20	36

Further summary data from the last 10 years are shown in the table below. The maximum on-site count is 12 birds on the 16th November 1996.

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Days-recorded	17	21	11	8	12	27	31	30	35	27
Bird Days	30	33	17	13	25	44	55	51	58	51

Snow Bunting *Plectrophenax nivalis* (0; 1)

Rare visitor.

2013: Not recorded.

Summary: Surprisingly there are two Tyttenhanger records of this unusual Hertfordshire bird with one seen flying with Meadow Pipits on 20th November 1988 and then a first winter male found on 29th November 1996 that stayed for three days. With only 9 records for the county in the period 1983-2012, Tyttenhanger rates very highly for this tricky Hertfordshire species.

Yellowhammer *Emberiza citronella* (10; 50)

Regular winter visitor especially around Tyttenhanger Farm.

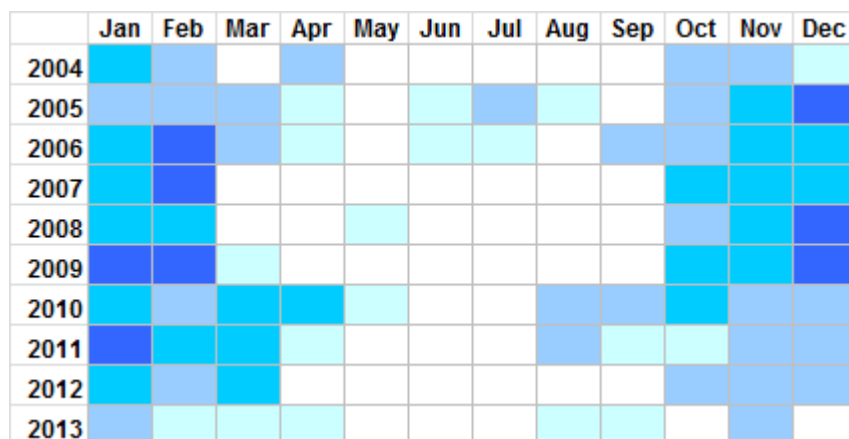
2013: A species that showed a dramatic decline on site in the last year with no records of 10 or more birds (3 in 2012) and only recorded on 10 days all year! The maximum count was of just 4 birds on the 2nd January. Small numbers of birds were recorded on days in both winter periods (6 and 4), but all in all a very disappointing year. A summary of monthly maxima data from the last 10 years is shown in the tables on the next page.

Summary: The last 10 years has seen this species on something of a rollercoaster ride from the “average” years of 2004 and 2005 through to the peak of 2008 and 2009 and then down to the very bottom in 2013. We hadn’t realised quite how dramatic this decline had been until we carried out the analyses shown in Figure 17 and in the tables on the next page. Needless to say, we hope that the diabolical 2013 was just a blip on the screen and that things will return to normal in the years to come.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Max 2013	4	1	1	1	0	0	0	1	1	0	3	0
Median 2004-2013**	20	9	2	1	0	0	0	0	0	4	8	12
Maximum 2004-2013**	50	30	20	10	1	1	6	3	3	20	20	44
Minimum 2004-2013**	2	1	0	0	0	0	0	0	0	0	3	0

**Median, maximum and minimum values of days recorded for each month in the period 2004-13.

	2008	2009	2010	2011	2012	2013
Days Recorded	46	64	63	48	34	10
Bird days	366	598	291	276	156	16
Counts ≥ 10	18	23	4	7	3	0



Key

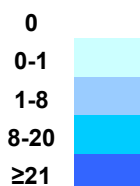


Figure 17 Monthly maxima for Yellowhammer *Emberiza citrinella* shown graphically by month and year for the last 10 years.

This is clearly a species on which we need to keep a close eye and the above table is very much a work in-progress as we go back and digitise the data from 2004-2007 to build a more complete picture of the last 10 years. In addition to the above, it is worth mentioning that the maximum count in the last 10 years was of 50 birds on 9th January 2009. Although first noted on-site in the 1983 Hertfordshire Bird Report, there are no other records of note from that source.

Reed Bunting *Emberiza schoeniclus* (10; 14)

Resident with a small number of presumed breeding pairs.

2013: Reported throughout the year with a number of singing males noted across the site - but with no confirmed breeding. The maximum count for the year was of 10 birds on the 14th November.

Summary: First recorded in the Hertfordshire Bird Report of 1986, there are relatively few records after that until 2004,- although interestingly there is a record of 12 pairs present in 1997. The last ten years has seen most years produce around 70 records – with birds seen in most months, and generally at least 2-3 singing males distributed around the site. Maxima in most recent years is in double figures with the largest count being 14 birds on the 23rd January 2012.

Corn Bunting *Miliaria calandra* (1; 33)

Infrequent visitor.

2013: Not recorded.

Summary: The first record in the Hertfordshire Bird Reports is of singing males/pairs present in 1987. The following year there is a record of a winter flock of 33 birds – unfortunately with no date attached. Then there is then a gap until 1997 when 2 birds were reported on 28th December and then the following year there was a single bird present on the 5th April. The last 10 years has seen just a single record of 3 birds at the feeding station at Tyttenhanger Farm on the 19th January 2005.

Escapes & Birds of Uncertain Origin

2013

Domestic Goose *Anser* sp.

Reported throughout the year with a maximum of 38 on the 18th August ; 9 young were noted this year.

Muscovy Duck *Cairina moschata*

One noted on five times throughout the year on the 6th April, 21st April, 26th May, 28th July and 3rd August.

Lanner (Type) Falcon *Falco* sp.

One seen on the 16th, 27th July 3rd, 14th August and 11th September had a falconer's closed ring.

Indian Peafowl *Pavo cristatus*

Six records all from the Tyttenhanger House area, in April / June and October.

Summary

The following is a list of other escapes and birds of uncertain origin that have been recorded since 1983. The list is by no means exhaustive as there are undoubtedly records that have been missed. The date shows the first year in which they were recorded.

Black Swan	<i>Cygnus atratus</i>	1997
Australian Wood Duck	<i>Chenonetta jubata</i>	1986
Bar-headed Goose	<i>Anser indicus</i>	1987
Snow Goose	<i>Anser caerulescens</i>	1987
Hutchinson's Goose	<i>Branta hutchinsoni minima</i>	2006
Pink-footed Goose	<i>Anser brachyrhynchus</i>	1988
Cape Shelduck	<i>Tadorna cana</i>	1988
Ruddy Shelduck	<i>Tadorna ferruginea</i>	1991
Lesser White-fronted Goose	<i>Anser erythropus</i>	1993
Baikal Teal	<i>Anas formosa</i>	2001
Argentine Blue-Bill	<i>Oxyura vittata</i>	2002
Grey-headed Gull	<i>Chroicocephalus cirrocephalus</i>	2001
Southern Lapwing	<i>Vanellus chilensis</i>	2002
Monk Parakeet	<i>Myiopsitta monachus</i>	1996
Cockatiel	<i>Nymphicus hollandicus</i>	1996
Indian Peafowl	<i>Pavo cristatus</i>	2006
Common Crane	<i>Grus grus</i>	2008
Skua sp	<i>Skua sp.</i>	1988

Appendix 1

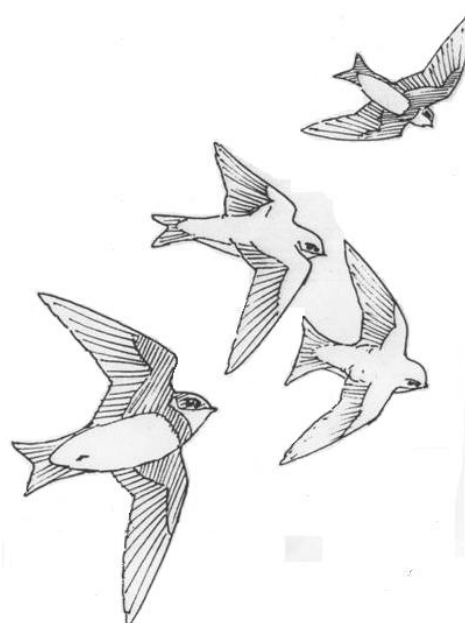
Arrival and Departure Dates for Common Migrants

Arrival dates for 2013 are shown along with the earliest/latest dates for Tyttenhanger that we can find for this species shown in brackets. This is very much a work-in-progress and if the reader has any earlier/later dates then we'd be grateful if they could contact the authors so that this table can be revised in future reports.

Species	Arrival Date	Departure Date
Summer Migrants		
Hobby	8 th May (1 st Apr)	7 th Oct (7 th Oct)
Little Ringed Plover	15 th Apr (9 th Mar)	17 th Aug (1 st Oct)
Common Sandpiper	16 th Apr (28 th Mar) ⁽¹⁾	7 th Oct (8 th Nov)
Common Tern	7 th Apr (4 th Apr)	26 th Aug (27 th Sep)
Cuckoo	24 th Apr (25 th Mar)	16 th Aug (25 th Sep)
Sand Martin	13 th Apr (15 th Mar)	15 th Sep (7 th Oct)
Swallow	13 th Apr (25 th Mar)	6 th Oct (22 nd Oct)
House Martin	13 th Apr (31 st Mar)	22 nd Sep (5 th Nov)
Yellow Wagtail	15 th Apr (30 th Mar)	14 th Sep (5 th Oct)
Whinchat	19 th Apr (14 th Apr)	31 st Aug (8 th Oct)
Wheatear	30 th Mar (14 th Mar)	18 th Sep (8 th Oct)
Sedge Warbler	15 th Apr (7 th Apr)	17 th Sep (14 th Sep)
Reed Warbler	16 th Apr (7 th Apr)	6 th Aug (28 th Sep)
Willow Warbler	15 th Apr (18 th Mar)	28 th Aug (12 th Oct)
Chiffchaff	28 th Mar (9 th Mar) ⁽²⁾	19 th Oct (6 th Dec) ⁽²⁾
Blackcap	14 th Apr (28 th Mar)	6 th Oct (30 th Oct)
Garden Warbler	23 rd Apr (17 th Apr)	28 th Jul (17 th Sep)
Whitethroat	15 th Apr (4 th Apr)	24 th Sep (2 nd Oct)
Lesser Whitethroat	21 st Apr (15 th Apr)	27 th Jun (14 th Sep)
Spotted Flycatcher	NR (10 th May)	17 th Sep (25 th Sep)
Winter Migrants		
Golden Plover	11 th Oct (29 th Sep)	10 th May (10 th May)
Fieldfare	15 th Oct (18 th Sep)	12 th May (12 th May)
Redwing	14 th Oct (30 th Sep)	13 th Apr (14 th Apr)
Siskin	2 nd Nov (21 st Sep)	27 th Mar (10 th Apr)
Lesser Redpoll	19 th Oct (14 th Oct)	23 rd Apr (23 rd Apr)

⁽¹⁾ A bird on the 31st January 2005 is considered an overwintering bird rather than a migrant.

⁽²⁾ Records from December through to February are treated as overwintering rather than migrant birds.



SPECIES YEARLISTS FOR TYTTENHANGER GRAVEL PITS 2004-2012

The following is a list of species that have occurred at Tyttenhanger Gravel Pits for which we have been able to locate records. The year lists and totals have been revised in accordance with the records accepted in the Hertfordshire Bird Report for the years up until 2012. Some records for 2013 may still be pending but the list is indicative of the species reported for the year. Species shaded in yellow have not been seen in the period 2004-2012 and records shaded in blue are first records for the site.

The list is also slightly different from previous years in the addition of a column that indicates the first year for which we are able to find records for that species. Most of these dates are drawn from the Hertfordshire Bird Report – but we would suggest that anybody with earlier records for any of the species listed contact the editors.

	First Record	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Mute Swan	1987	1	1	1	1	1	1	1	1	1	1
Bewick's Swan	1985	0	0	0	0	1	0	0	0	1	0
Whooper Swan	2004	1	1	1	0	0	0	0	0	0	0
White-fronted Goose	1993	0	0	0	0	0	0	0	1	0	0
Bean Goose (Tundra)	2011	0	0	0	0	0	0	0	1	0	0
Greylag Goose	1986	1	1	1	1	1	1	1	1	1	1
Canada Goose	1984	1	1	1	1	1	1	1	1	1	1
Barnacle Goose	2006	1	0	1	1	1	0	1	1	0	0
Brent Goose	1996	0	0	1	0	0	0	1	0	0	0
Egyptian Goose	1993	1	1	0	1	1	1	1	0	1	1
Shelduck	1986	1	1	1	1	1	1	1	1	1	1
Mandarin Duck	1988	1	0	1	0	1	1	0	0	1	0
Wigeon	1983	1	1	1	1	1	1	1	1	1	1
Gadwall	1987	1	1	1	1	1	1	1	1	1	1
Teal	1983	1	1	1	1	1	1	1	1	1	1
Mallard	1983	1	1	1	1	1	1	1	1	1	1
Pintail	1985	1	1	1	1	0	1	1	1	1	0
Garganey	1986	0	0	1	0	1	0	0	1	0	0
Shoveler	1986	1	1	1	1	1	1	1	1	1	1
Red-crested Pochard	1988	1	0	0	0	0	1	1	1	0	0
Pochard	1986	1	1	1	1	1	1	1	1	1	1
Tufted Duck	1983	1	1	1	1	1	1	1	1	1	1
Scaup	2007	0	0	0	1	0	0	0	0	0	0
Lesser Scaup	1996	0	0	0	0	0	0	0	0	0	0
Common Scoter	2000	0	0	0	0	0	0	0	0	0	0
Goldeneye	1983	1	1	1	0	1	1	1	1	1	1
Smew	1997	0	0	0	0	0	0	0	0	1	0
Goosander	1988	0	1	1	1	1	1	1	1	1	0
Ruddy Duck	1989	1	0	1	1	1	1	1	1	1	0
Red-legged Partridge	1983	1	1	1	1	1	1	1	1	1	1
Grey Partridge	1983	0	1	1	1	1	1	1	1	0	1
Pheasant	1996	1	1	1	1	1	1	1	1	1	1
Little Grebe	1984	1	1	1	1	1	1	1	1	1	1
Great Crested Grebe	1983	1	1	1	1	1	1	1	1	1	1
Black-necked Grebe	2002	0	0	0	0	0	0	1	0	0	1
Cormorant	1989	1	1	1	1	1	1	1	1	1	1
Shag	1988	0	0	0	0	0	0	0	0	0	0
Bittern	1996	0	0	0	0	0	1	1	0	0	0
Great White Egret	2013	0	0	0	0	0	0	0	0	0	1
Little Egret	1999	1	1	1	1	1	1	1	1	1	1
Grey Heron	1983	1	1	1	1	1	1	1	1	1	1
Black Stork	1990	0	0	0	0	0	0	0	0	0	0
White Stork	2006	0	0	1	0	0	0	0	0	1	0

	First Record	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Glossy Ibis	2009	0	0	0	0	0	1	0	0	0	1
Honey-Buzzard	1987	0	1	0	0	0	0	0	0	0	0
Red Kite	2004	1	1	1	1	1	1	1	1	1	1
Montague's Harrier	2011	0	0	0	0	0	0	0	1	0	0
Marsh-Harrier	1991	1	0	0	1	0	1	1	1	0	0
Goshawk	1996	0	0	0	0	0	0	0	0	0	0
Sparrowhawk	1985	1	1	1	1	1	1	1	1	1	1
Buzzard	1991	1	1	1	1	1	1	1	1	1	1
Osprey	1988	0	1	1	1	1	1	1	0	1	1
Kestrel	1984	1	1	1	1	1	1	1	1	1	1
Merlin	1996	1	0	0	1	0	0	0	0	1	0
Hobby	1983	1	1	1	1	1	1	1	1	1	1
Peregrine Falcon	1994	1	1	1	1	1	1	1	1	1	1
Water Rail	2008	1	1	1	1	1	1	1	1	1	1
Moorhen	1992	1	1	1	1	1	1	1	1	1	1
Coot	1987	1	1	1	1	1	1	1	1	1	1
Oystercatcher	1985	1	1	1	1	1	1	1	1	1	1
Black-winged Stilt	1998	0	0	0	0	0	0	0	0	0	0
Avocet	1988	1	1	0	0	1	1	0	1	1	0
Stone Curlew	2002	0	0	0	1	0	0	0	0	0	0
Little Ringed Plover	1983	1	1	1	1	1	1	1	1	1	1
Ringed Plover	1983	1	1	1	1	1	1	1	1	1	1
Golden Plover	1985	1	1	1	1	1	1	1	1	1	1
Grey Plover	1987	1	0	1	0	0	0	0	0	0	0
Lapwing	1983	1	1	1	1	1	1	1	1	1	1
Knot	1986	1	0	1	1	0	1	0	0	1	0
Sanderling	1986	1	1	1	0	1	1	1	0	0	1
Little Stint	1987	1	0	0	1	0	0	0	0	0	0
Temminck's Stint	1988	0	0	0	0	0	0	0	0	0	0
Curlew Sandpiper	1987	0	0	0	0	0	0	0	0	0	1
Dunlin	1983	1	1	1	1	1	1	1	1	1	1
Ruff	1984	0	1	1	1	1	0	1	1	1	1
Jack Snipe	1985	1	1	1	1	1	1	0	1	0	1
Snipe	1985	1	1	1	1	1	1	1	1	1	1
Woodcock	1995	0	1	0	0	1	1	1	1	1	1
Black-tailed Godwit	1987	0	1	1	1	1	1	1	1	1	1
Bar-tailed Godwit	1987	1	0	1	0	0	0	0	1	1	0
Whimbrel	1986	1	0	1	1	1	1	1	1	1	0
Curlew	1986	1	1	1	1	1	0	1	1	1	1
Spotted Redshank	1985	0	1	1	0	0	0	0	0	0	1
Redshank	1983	1	1	1	1	1	1	1	1	1	1
Greenshank	1983	1	1	1	1	1	1	1	1	1	1
Green Sandpiper	1984	1	1	1	1	1	1	1	1	1	1
Wood Sandpiper	1985	0	0	0	1	0	1	0	0	0	0
Common Sandpiper	1983	1	1	1	1	1	1	1	1	1	1
Turnstone	1991	1	1	1	0	1	0	0	0	0	1
Mediterranean Gull	2001	1	1	1	1	1	1	0	1	1	1
Little Gull	1987	0	0	0	0	1	0	0	0	1	1
Black-headed Gull	1984	1	1	1	1	1	1	1	1	1	1
Common Gull	1996	1	1	1	1	1	1	1	1	1	1
Lesser Black-backed Gull	1996	1	1	1	1	1	1	1	1	1	1
Yellow-legged Gull	1996	0	1	1	0	1	1	0	1	1	1
Caspian Gull	2006	0	0	1	0	0	0	0	0	0	0

	First Record	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Herring Gull	1984	1	1	1	1	1	1	1	1	1	1
Iceland Gull	1998	0	0	0	0	0	0	0	0	0	0
Great Black-backed Gull	1996	1	1	1	1	1	1	1	1	1	1
Kittiwake	1993	0	0	0	0	0	0	1	0	1	0
Little Tern	1988	0	0	0	0	0	1	1	0	0	0
Black Tern	1987	1	1	0	0	1	1	0	1	1	0
Sandwich Tern	1996	1	0	0	0	0	0	1	1	1	0
Common Tern	1984	1	1	1	1	1	1	1	1	1	1
Arctic Tern	1992	0	1	0	0	0	0	0	0	0	0
Feral Pigeon	1996	1	1	1	1	1	1	1	1	1	1
Stock Dove	1984	1	1	1	1	1	1	1	1	1	1
Woodpigeon	1987	1	1	1	1	1	1	1	1	1	1
Collared-Dove	1983	1	1	1	1	1	1	1	1	1	1
Turtle-Dove	1986	1	0	0	0	0	0	0	0	0	0
Ring-necked Parakeet	1993	0	1	1	0	1	0	1	1	1	1
Cuckoo	1983	1	1	1	1	1	1	1	1	1	1
Barn Owl	1997	0	0	1	0	1	0	0	0	1	1
Little Owl	1996	1	1	1	1	1	1	1	1	1	1
Tawny Owl	1985	1	1	1	1	1	1	1	1	1	1
Long-eared Owl	1993	0	0	0	0	0	0	0	0	0	0
Short-eared Owl	1998	1	0	0	0	0	0	0	1	0	0
Swift	1996	1	1	1	1	1	1	1	1	1	1
Kingfisher	1984	1	1	1	1	1	1	1	1	1	1
Hoopoe	2013	0	0	0	0	0	0	0	0	0	1
Green Woodpecker	1983	1	1	1	1	1	1	1	1	1	1
Great Spotted Woodpecker	1990	1	1	1	1	1	1	1	1	1	1
Lesser Spotted Woodpecker	1984	1	1	1	1	0	1	1	1	1	1
Wryneck	2010	0	0	0	0	0	0	1	0	0	0
Short-toed Lark	1991	0	0	0	0	0	0	0	0	0	0
Skylark	1995	1	1	1	1	1	1	1	1	1	1
Sand Martin	1983	1	1	1	1	1	1	1	1	1	1
Swallow	1988	1	1	1	1	1	1	1	1	1	1
House Martin	1996	1	1	1	1	1	1	1	1	1	1
Tree Pipit	1987	0	0	0	0	0	0	0	0	0	0
Meadow Pipit	1984	1	1	1	1	1	1	1	1	1	1
Rock Pipit	1992	0	0	0	0	1	0	0	0	0	0
Water Pipit	1992	1	0	1	0	0	0	0	0	1	0
Yellow Wagtail	1983	1	1	1	1	1	1	1	1	1	1
Grey Wagtail	1989	1	1	1	1	1	1	1	1	1	1
Pied Wagtail	1994	1	1	1	1	1	1	1	1	1	1
Waxwing	2010	0	0	0	0	0	0	1	1	0	0
Wren	1996	1	1	1	1	1	1	1	1	1	1
Dunnock	1996	1	1	1	1	1	1	1	1	1	1
Robin	1996	1	1	1	1	1	1	1	1	1	1
Nightingale	1998	0	0	0	0	0	0	0	0	0	0
Black Redstart	1988	1	0	0	0	1	0	1	1	0	0
Redstart	1989	0	0	1	1	1	1	1	0	1	1
Whinchat	1989	1	1	1	1	1	1	1	1	1	1
Stonechat	1985	1	1	1	1	1	1	1	1	1	1
Wheatear	1984	1	1	1	1	1	1	1	1	1	1
Ring Ouzel	1987	0	0	0	1	1	0	1	0	1	0
Blackbird	1996	1	1	1	1	1	1	1	1	1	1
Fieldfare	1984	1	1	1	1	1	1	1	1	1	1

	First Record	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Song Thrush	1996	1	1	1	1	1	1	1	1	1	1
Redwing	1987	1	1	1	1	1	1	1	1	1	1
Mistle Thrush	1984	1	1	1	1	1	1	1	1	1	1
Grasshopper Warbler	1985	0	1	0	0	0	0	0	0	0	0
Sedge Warbler	1984	1	1	1	1	1	1	1	1	1	1
Reed Warbler	1996	1	1	1	1	1	1	1	1	1	1
Blackcap	1996	1	1	1	1	1	1	1	1	1	1
Garden Warbler	1996	1	1	1	1	1	1	1	1	1	1
Lesser Whitethroat	1987	1	1	1	1	1	1	1	1	1	1
Whitethroat	1984	1	1	1	1	1	1	1	1	1	1
Dartford Warbler	2006	0	0	1	0	0	0	0	0	0	0
Wood Warbler	1994	0	0	0	0	0	0	0	0	0	0
Chiffchaff	1996	1	1	1	1	1	1	1	1	1	1
Willow Warbler	1990	1	1	1	1	1	1	1	1	1	1
Goldcrest	1996	1	1	1	1	1	1	1	1	1	1
Firecrest	1987	0	0	0	0	0	0	0	0	0	1
Spotted Flycatcher	1996	1	1	1	1	1	1	1	1	1	1
Pied Flycatcher	1998	0	0	0	0	0	0	1	0	0	1
Long-tailed Tit	1996	1	1	1	1	1	1	1	1	1	1
Blue Tit	1996	1	1	1	1	1	1	1	1	1	1
Great Tit	1996	1	1	1	1	1	1	1	1	1	1
Coal Tit	1996	1	1	1	1	1	1	1	1	1	1
Willow Tit	1991	0	0	0	0	0	0	0	0	0	0
Marsh Tit	1990	1	1	1	1	0	0	1	0	0	0
Nuthatch	1986	1	1	1	1	1	1	1	1	1	1
Treecreeper	1996	1	1	1	1	1	1	1	1	1	1
Red-backed Shrike	1996	0	0	0	0	0	0	0	0	0	0
Jay	1996	1	1	1	1	1	1	1	1	1	1
Magpie	1992	1	1	1	1	1	1	1	1	1	1
Jackdaw	1996	1	1	1	1	1	1	1	1	1	1
Rook	1996	1	1	1	1	1	1	1	1	1	1
Carrion Crow	1988	1	1	1	1	1	1	1	1	1	1
Raven	2009	0	0	0	0	0	1	0	1	0	1
Starling	1988	1	1	1	1	1	1	1	1	1	1
House Sparrow	1996	1	1	1	1	1	1	1	1	1	1
Tree Sparrow	1983	1	1	1	1	1	1	1	1	1	1
Chaffinch	1991	1	1	1	1	1	1	1	1	1	1
Brambling	1999	1	1	1	1	1	1	1	1	0	0
Greenfinch	1996	1	1	1	1	1	1	1	1	1	1
Goldfinch	1984	1	1	1	1	1	1	1	1	1	1
Siskin	1996	1	1	1	1	1	1	1	1	1	1
Linnet	1983	1	1	1	1	1	1	1	1	1	1
Lesser Redpoll	1994	1	1	1	1	1	1	1	1	1	1
Mealy Redpoll	2005	0	1	1	0	0	0	0	1	0	0
Crossbill	2005	0	1	0	0	0	0	0	0	0	0
Bullfinch	1996	1	1	1	1	1	1	1	1	1	1
Hawfinch	2011	0	0	0	0	0	0	0	1	0	0
Snow Bunting	1988	0	0	0	0	0	0	0	0	0	0
Yellowhammer	1983	1	1	1	1	1	1	1	1	1	1
Reed Bunting	1986	1	1	1	1	1	1	1	1	1	1
Corn Bunting	1987	0	1	0	0	0	0	0	0	0	0
TOTAL		137	136	142	132	137	135	139	140	138	133