

# **An Analysis of Staffordshire Bird Records 2005 – 2014**

## **Waders**

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#### **1. Introduction**

In 2003 we started the computerisation of bird records for Staffordshire and since that time have placed all records going back to 2000 into the county database.

The major change to record keeping occurred in 2006 when the British Trust for Ornithology (BTO) introduced their national online bird recording system, BTO Birdtrack. This system allows anyone to record their bird sightings via the web and has resulted in a massive increase in the number of records we are able to obtain now. We have the ability to automatically extract Staffordshire data from Birdtrack, although some filtering and validation is required to ensure erroneous records are filtered out. This saves us the onerous task of manually keying in data.

Since there is now a considerable archive of bird records for the county, I have started analysing the data with the help of a free graphical software tool called QlikView. This document looks at Wader species and the period covered is a ten year period from 2005 to 2014; whilst the volume of data for 2005 is not quite as comprehensive as later years, there is sufficient data to enable us to look at meaningful trends. Data for the years 2000 – 2004 is less comprehensive so has been omitted.

The numerical counts in the graphs are obtained as follows: Each sighting in the database either has a quantity or the bird is recorded as being “present”. If present, it is assigned a quantity of 1. The quantities are added together to produce a total. This does mean the total can include repeat sightings of the same bird on different dates although most duplicate counts from different recorders will be removed. It would take much work to filter all duplicates out, but I doubt it would make much difference to the trends, just the overall numbers. Because of this, the total counts should not be seen as representing an actual total number of different birds – this would be a lower number. What remains meaningful however is the comparison of month against month and year against year.

There are three types of graph used as follows:

- a) Sighting Counts by Month. These are accumulated counts as described above broken down by month. These are used to show the relative frequencies of sightings during each month.
- b) Sightings by Year. These show the total counts broken down by the ten individual years examined. This is used to show population changes over the ten year period.
- c) Monthly Sightings. For an individual month, counts are accumulated by each day in the month. This is used for the arrival month(s) to show when birds arrive back in the county from their wintering grounds.

## **2. Acknowledgements**

My thanks go to all recorders who have provided bird records for Staffordshire over the years, without you none of this analysis would be possible.

Thanks to all site report compilers and those who have assisted with data entry, particularly Mary Holley, Holly Sissons and Matthew Sissons.

Thanks to Craig Slawson at Staffordshire Ecological Records (Staffordshire Wildlife Trust) for funding our use of MapMate software for the county bird database and assisting with data validation.

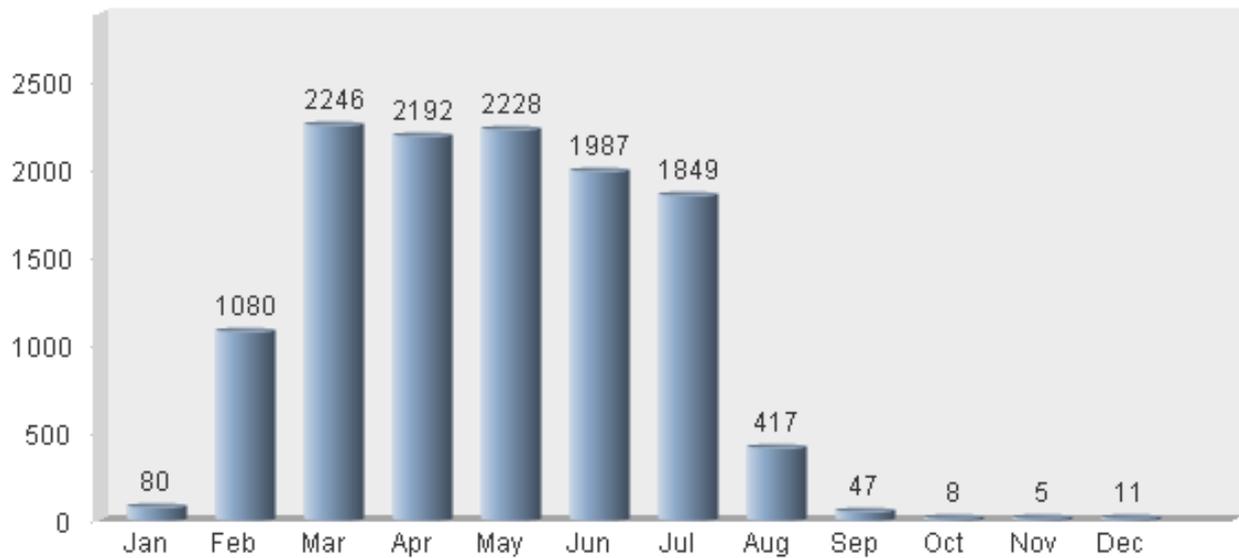
All graphs were made using QlikView freeware.

### 3. Detailed Species Accounts

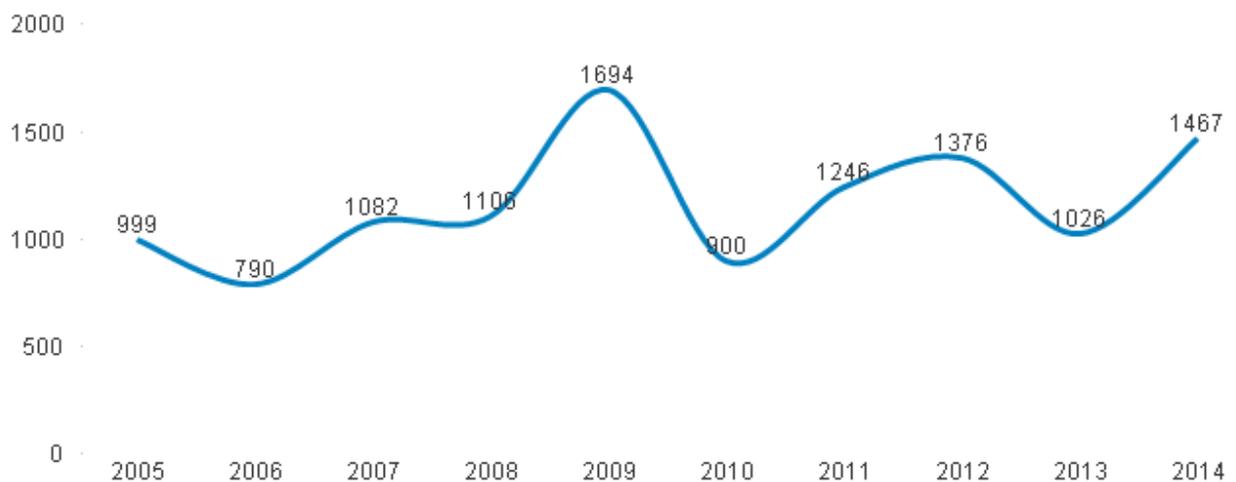
#### Oystercatcher

As can be seen from the monthly breakdown, Oystercatchers are a spring and summer visitor, generally arriving from February onwards, where many stay and breed but having bred, migrate elsewhere in the autumn and winter. Numbers of breeding birds have been steadily increasing, as reflected in the annual counts.

Records 2005 - 2014



Records by Year



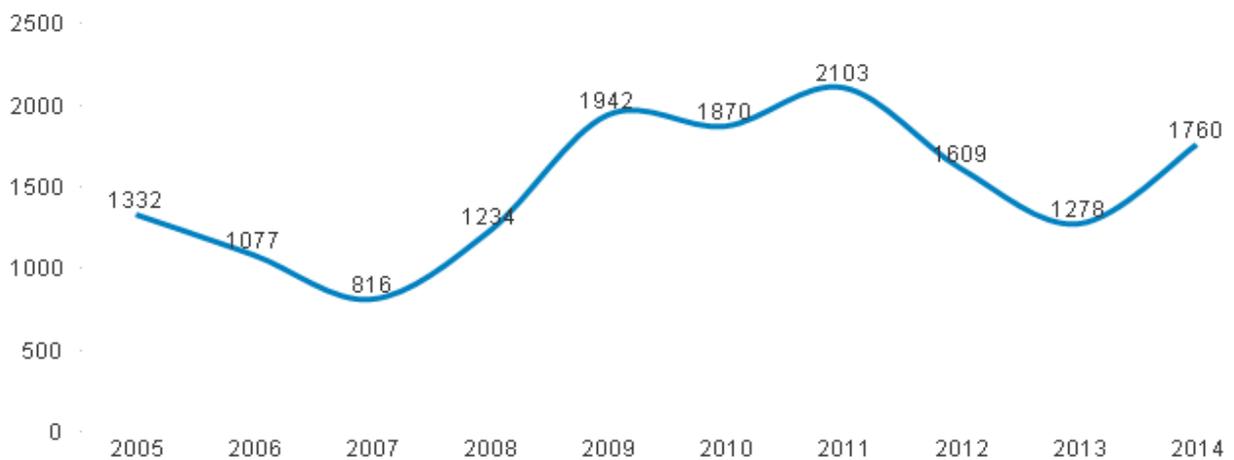
## Little Ringed Plover

Little Ringed Plovers are a county breeding bird but are also migratory, arriving from mid-March onwards. The peaks in April and May show that many early visitors move on to breed elsewhere, however many stay and breed here hence good numbers in June. July counts increase as juveniles fledge and birds on return migration stop off at our reservoirs. Most birds have gone by September but a small number linger on into October and very occasionally November. Numbers by year fluctuate but overall appear to be steady.

Sighting Counts by Month 2005 - 2014



Sightings by Year



March Sightings 2005 - 2014



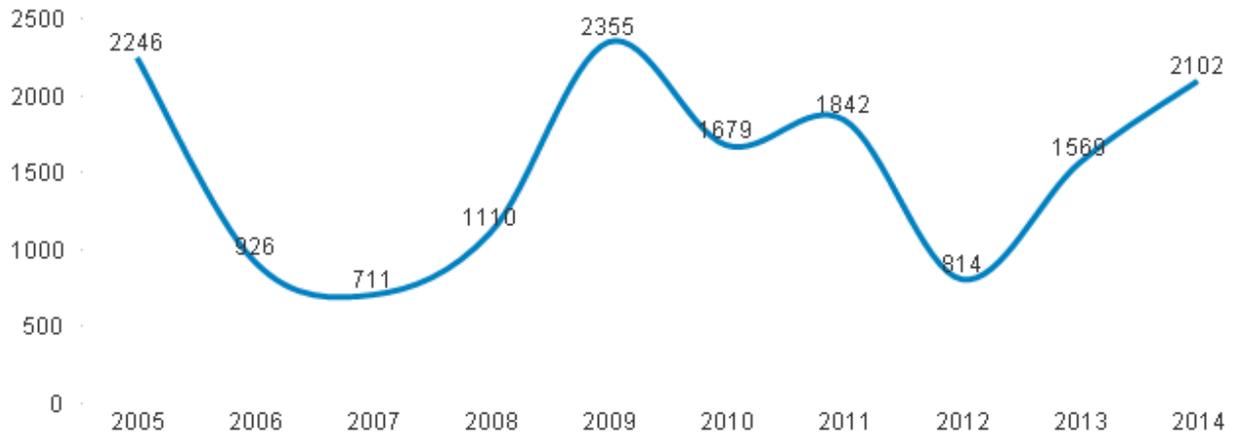
## Ringed Plover

As can be seen in the monthly breakdown, Ringed Plovers are primarily seen on spring and autumn migration, moving between their wintering and breeding grounds. A few pairs do stay and breed. Annual numbers are quite variable and will reflect the prevailing weather during migration and whether or not it causes birds to stop off here (poor weather) or pass straight through (good weather).

### Sighting Counts by Month 2005 - 2014



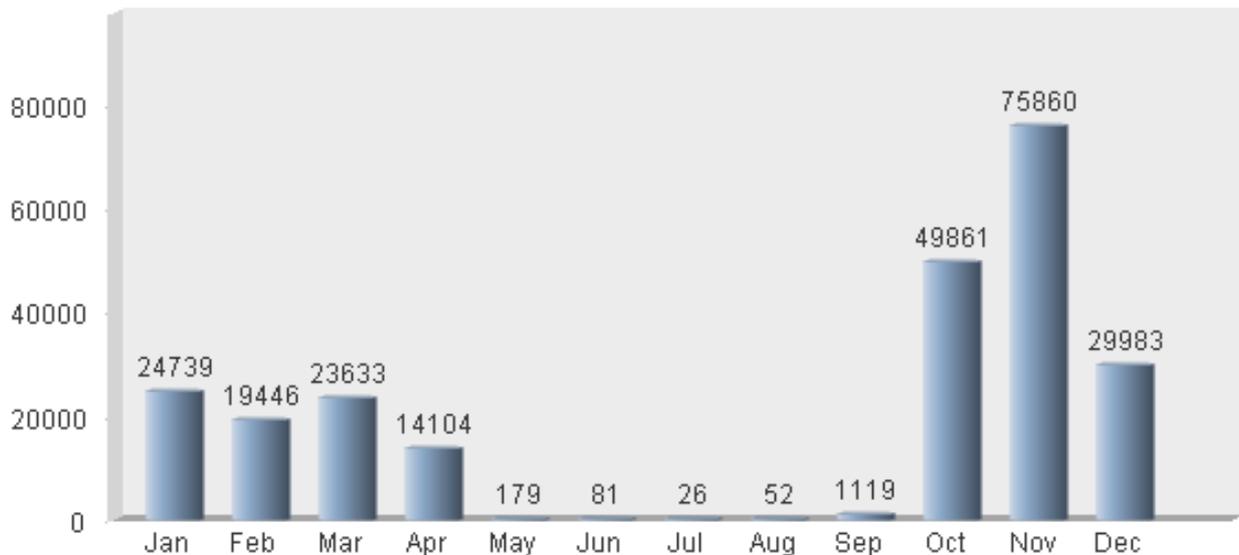
### Sightings by Year



## Golden Plover

The main occurrence of Golden Plovers in the county is in November, and as can be seen from the monthly breakdowns, this bird primarily winters in the county with most moving elsewhere during the summer months. The annual numbers show a fairly static population of wintering birds other than the massive dip in 2010. In that year, there were particularly cold periods both at the start of the year and from late November onwards and this will have forced the wintering birds to move away to warmer areas. In fact the extreme cold in December 2010 resulted in no birds being recorded anywhere in Staffordshire that month which is an exception to the norm.

### Sighting Counts by Month 2005 - 2014



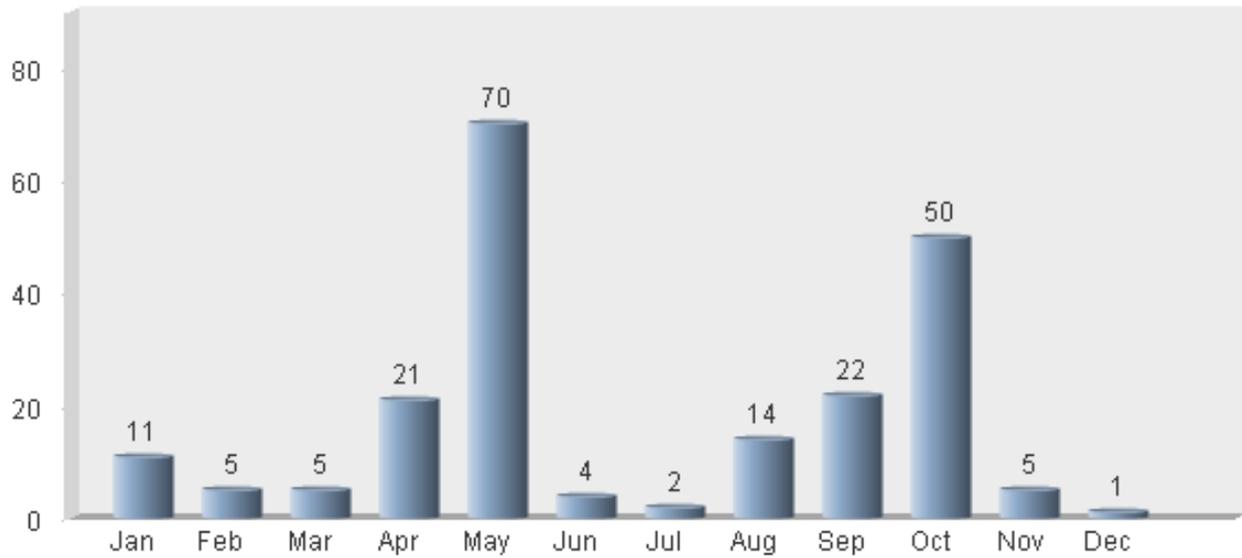
### Sightings by Year



## Grey Plover

Grey Plovers are scarce visitors to the county and the monthly breakdown shows these are mainly seen in May and October, on spring and autumn migration. Nonetheless, sightings have occurred in all months.

Sighting Counts by Month 2005 - 2014



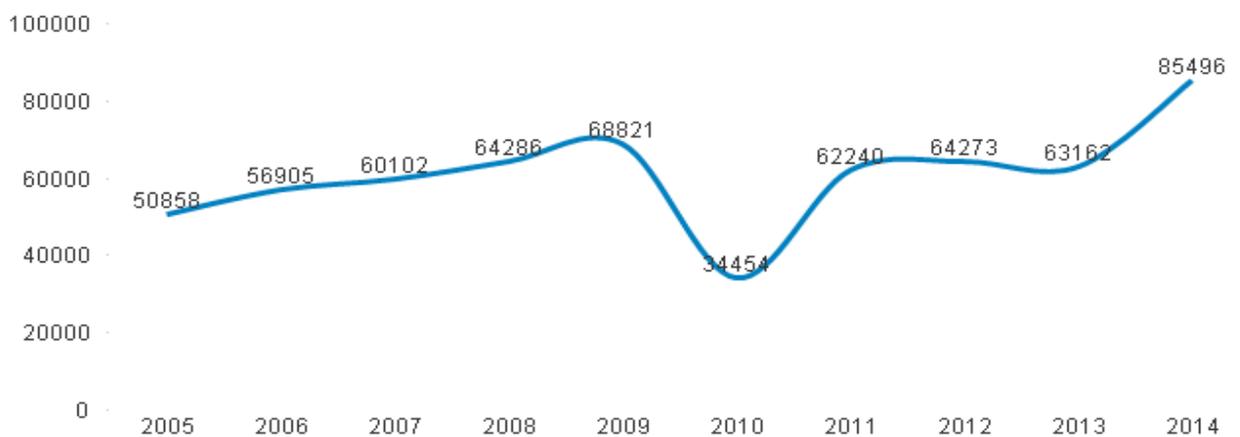
## Northern Lapwing

Although Lapwing is a breeding bird in the county, numbers increase massively in the autumn and winter months due to birds arriving from elsewhere in Britain and further afield, with peak numbers in January and February. Annual counts appear to be quite static other than in 2010 and 2014. The marked dip in 2010, as with Golden Plover, is explained by the severe cold at both ends of the year causing birds to move elsewhere. Future monitoring will be required to see whether the increase in 2014 is a one-off or not.

Records 2005 - 2014



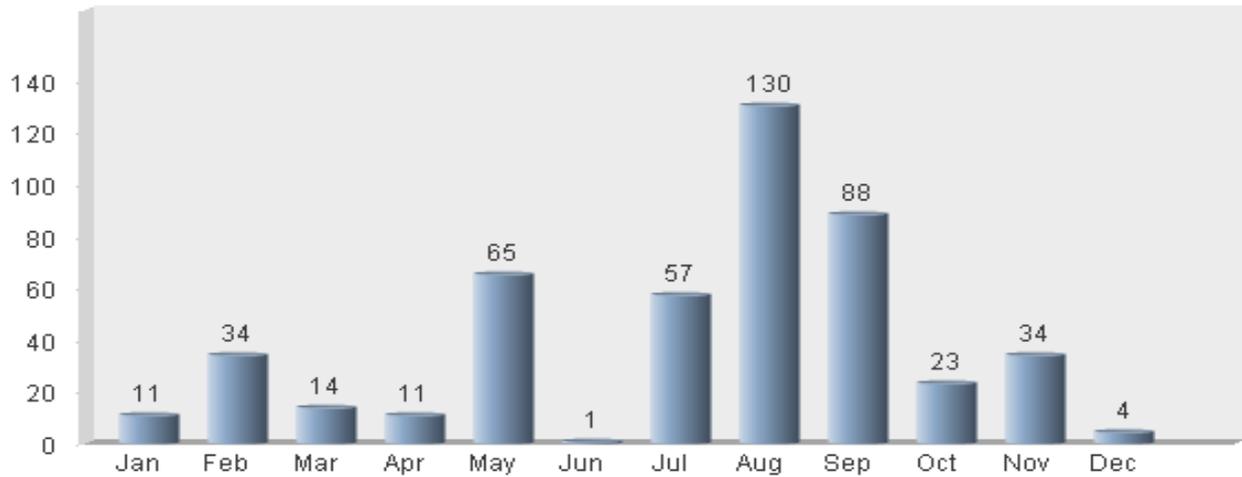
Records by Year



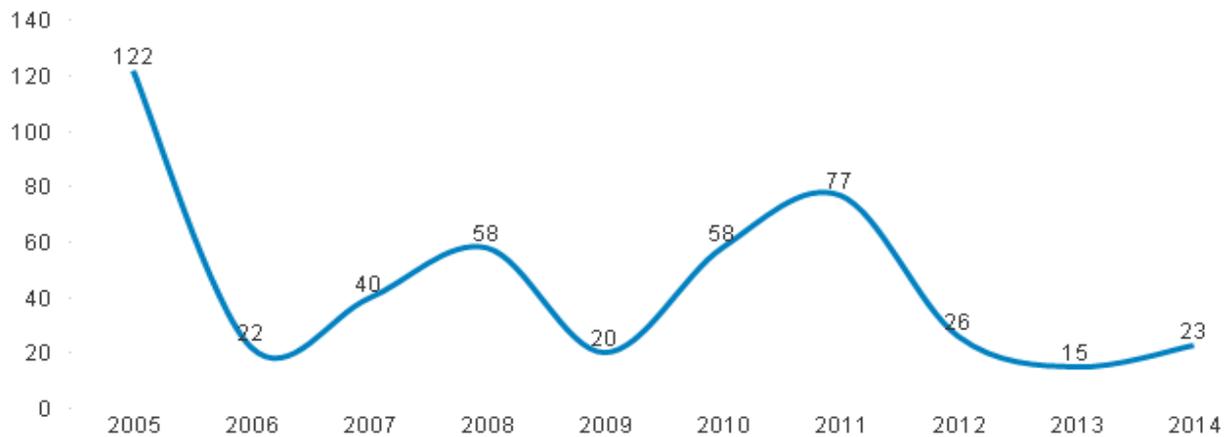
## Knot

Knot is principally a scarce spring and autumn passage migrant, but as can be seen from the monthly breakdown, they can appear in the county in any month of the year. Annual numbers are low and fluctuate depending on prevailing weather conditions.

Records 2005 - 2014

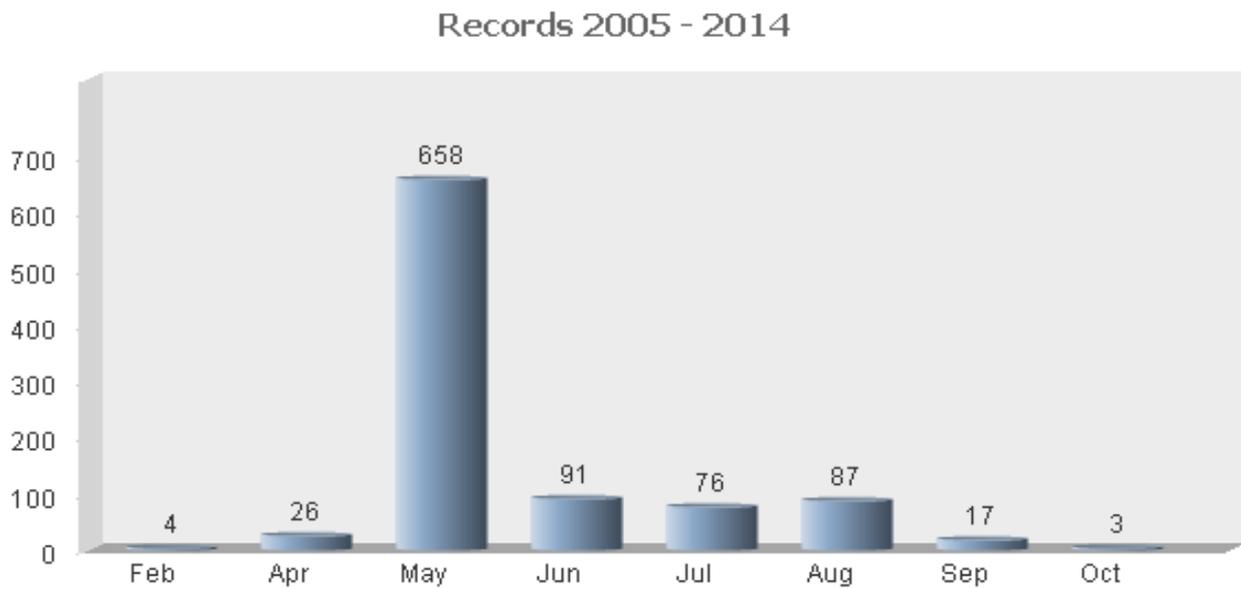


Records by Year



## Sanderling

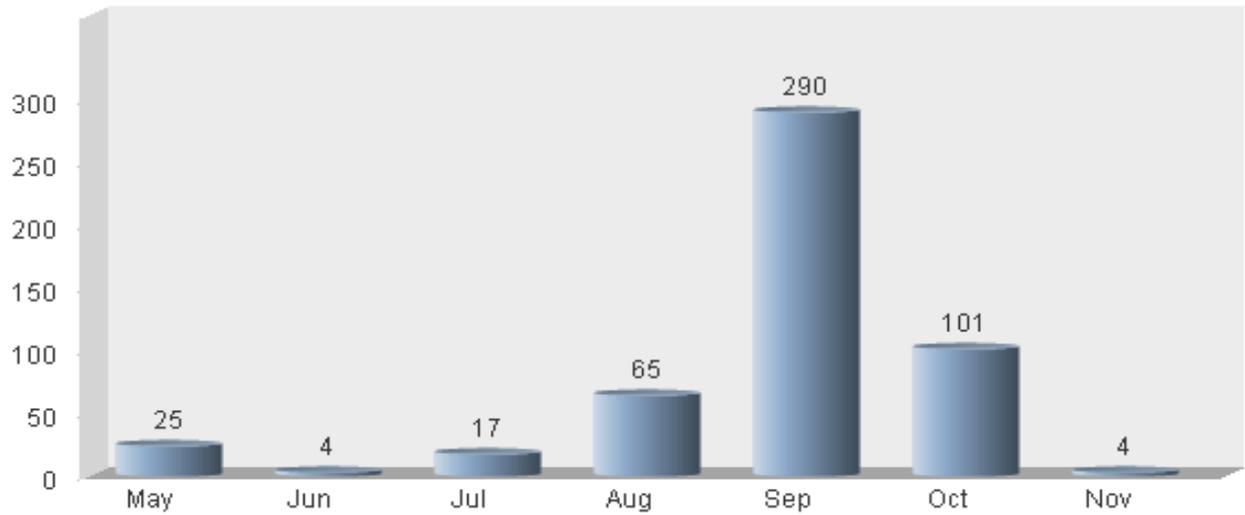
Sanderlings are scarce visitors to the county, with by far the majority turning up on spring migration in May with smaller numbers on autumn migration.



### Little Stint

Little Stint and Curlew Sandpiper are both scarce visitors to the county, with the majority being seen on autumn migration; September being the best month to see either bird.

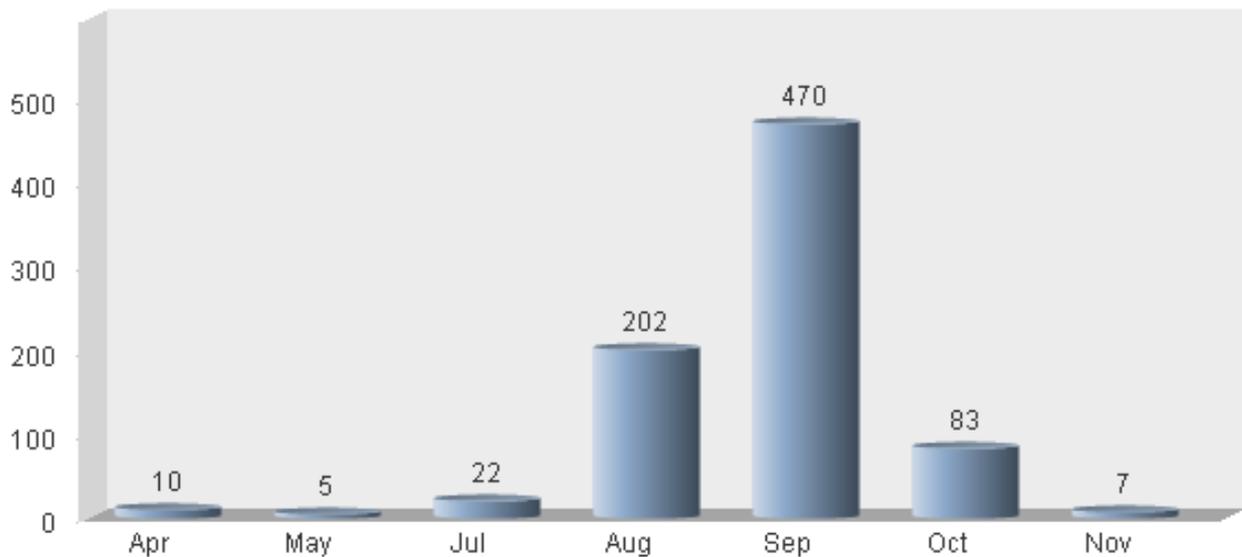
Records 2005 - 2014



### Curlew Sandpiper

See Little Stint commentary above.

Records 2005 - 2014



## Dunlin

Whilst Dunlin can turn up in any month of the year, spring passage in May is the best time to see them. Return passage in autumn is more spread out, with good numbers from July through to November. The annual counts are quite variable but appear to be neither increasing nor decreasing significantly during the ten years examined.

### Sighting Counts by Month 2005 - 2014



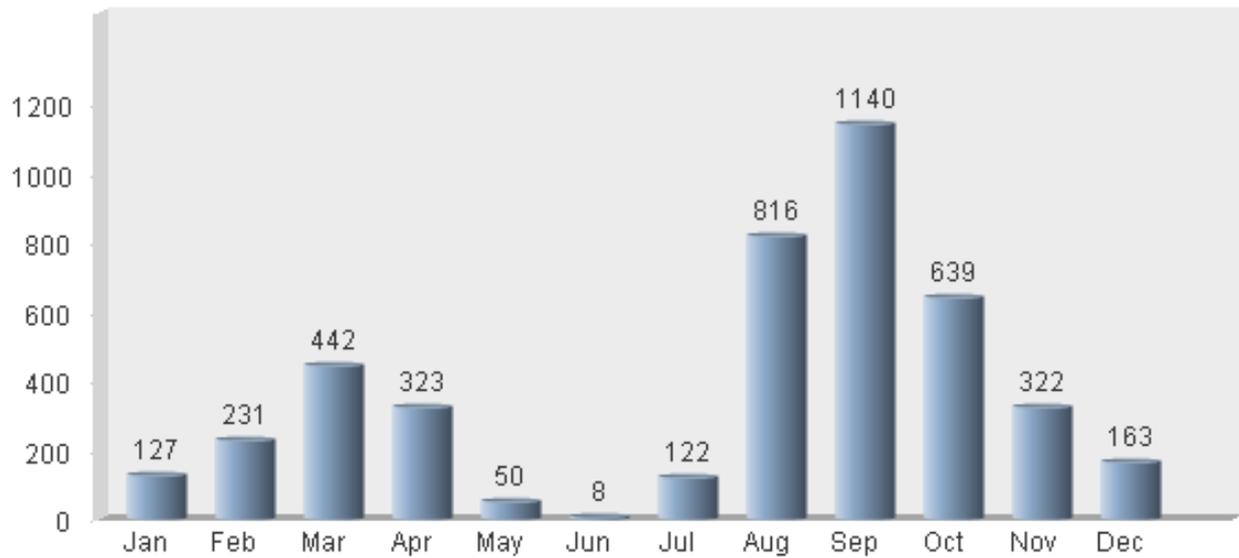
### Sightings by Year



## Ruff

Over the last three years, 2012-14, numbers of Ruff in the county have increased considerably. The reasons for this are unclear but are perhaps due to more suitable habitat being available. Whilst birds can be seen in any month of the year, they are mainly seen during autumn migration with smaller numbers on spring migration and even smaller numbers of wintering birds.

### Sighting Counts by Month 2005 - 2014



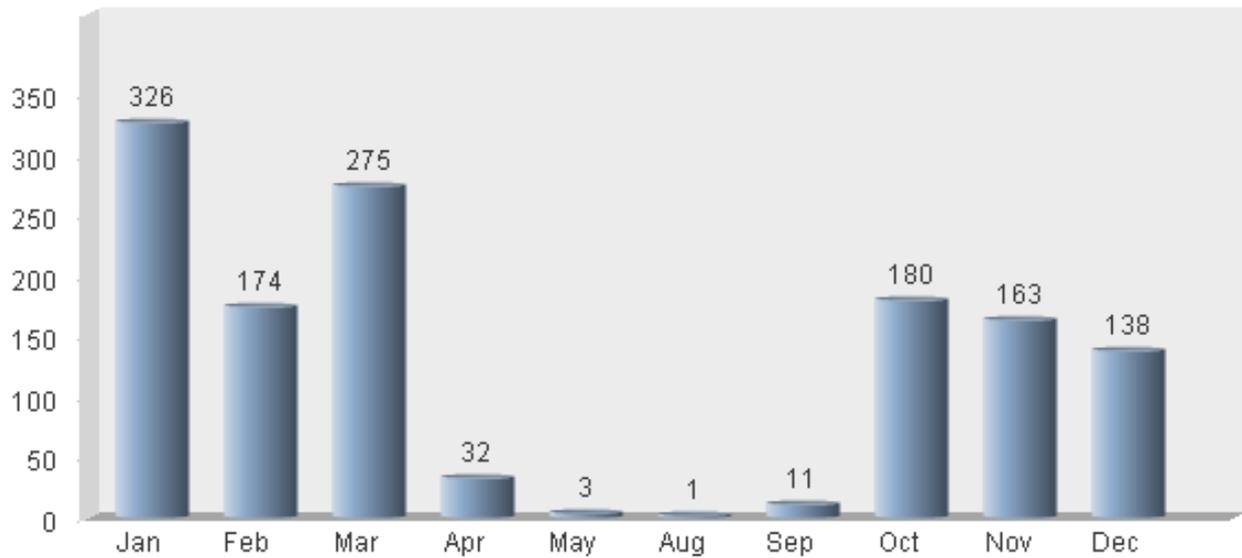
### Sightings by Year



## Jack Snipe

The elusive Jack Snipe winters in the county and moves off north to its breeding grounds during the summer. The annual counts show a general downward trend.

### Sighting Counts by Month 2005 - 2014



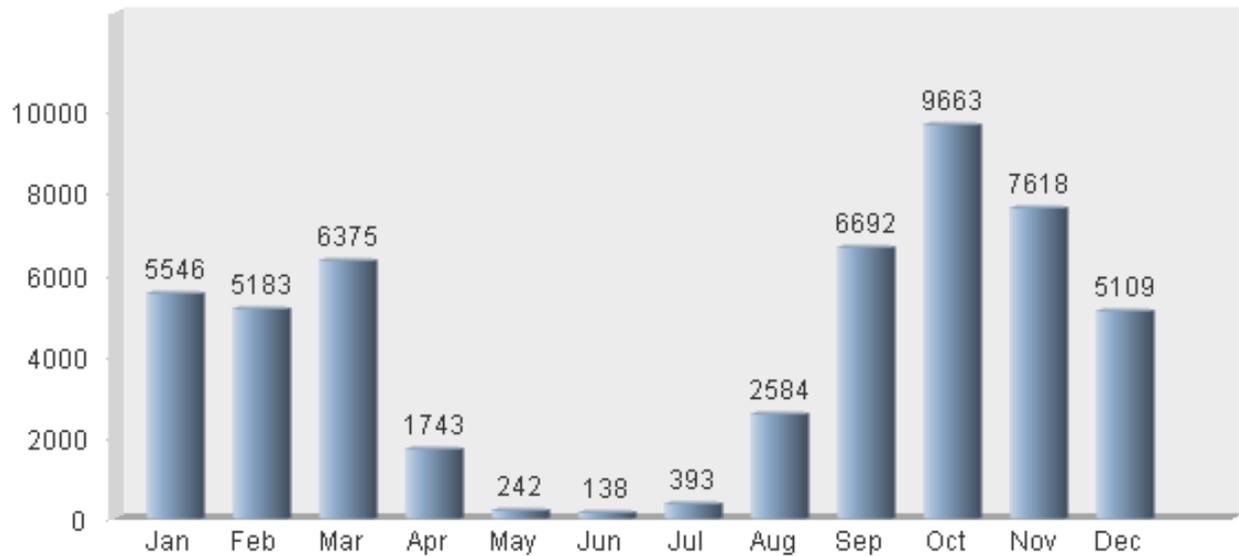
### Sightings by Year



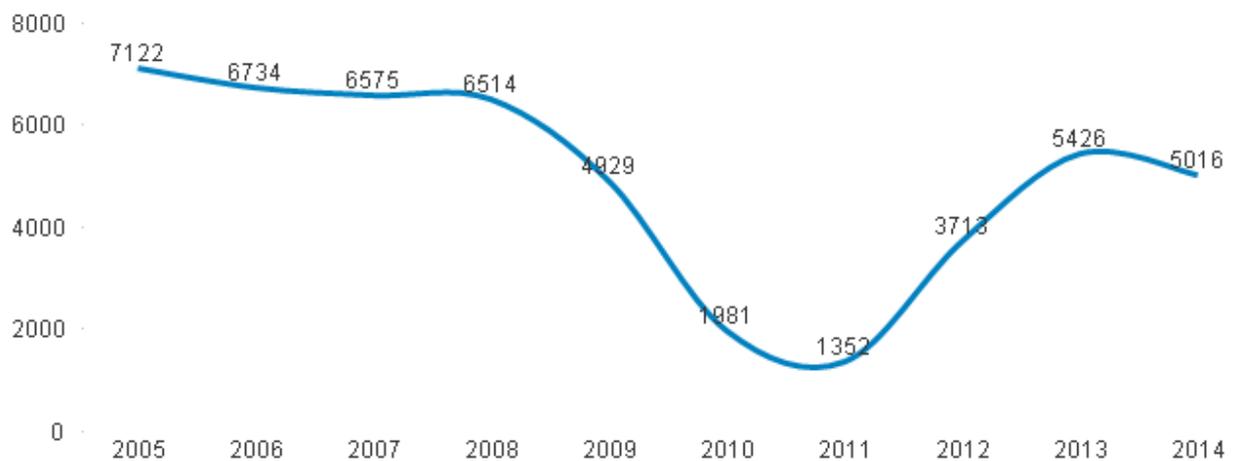
## Snipe

Snipe continue to breed in the county in small numbers but they are joined in the winter periods by large numbers of birds moving in from elsewhere, the peak being autumn passage in October. Annual numbers show a gradual decline, with the dip in 2010/2011 being due to the very cold winters causing birds to move elsewhere.

### Sighting Counts by Month 2005 - 2014



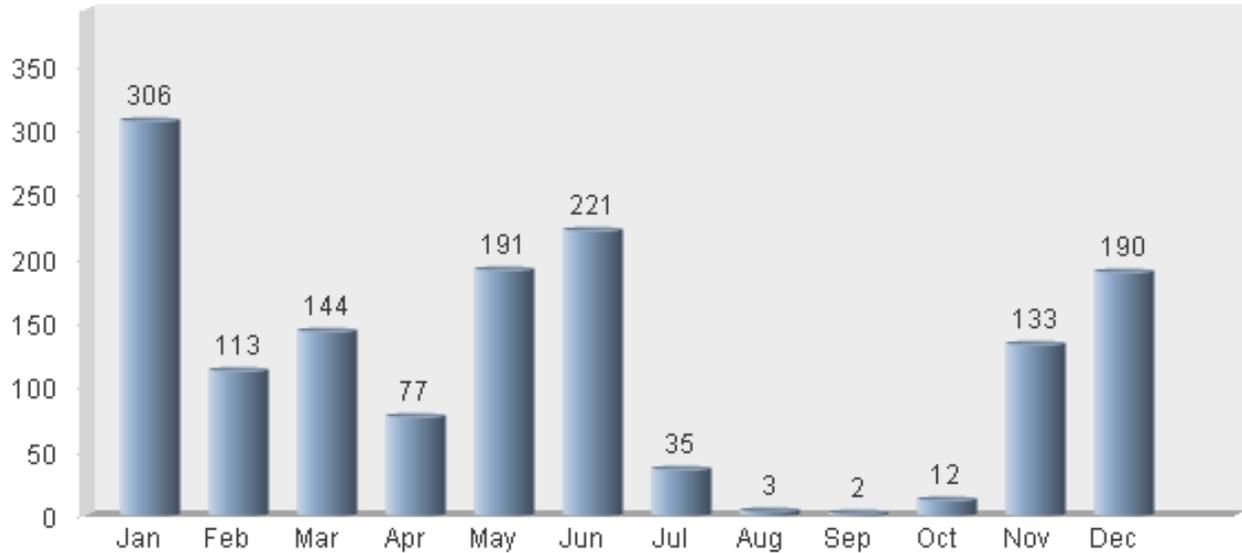
### Sightings by Year



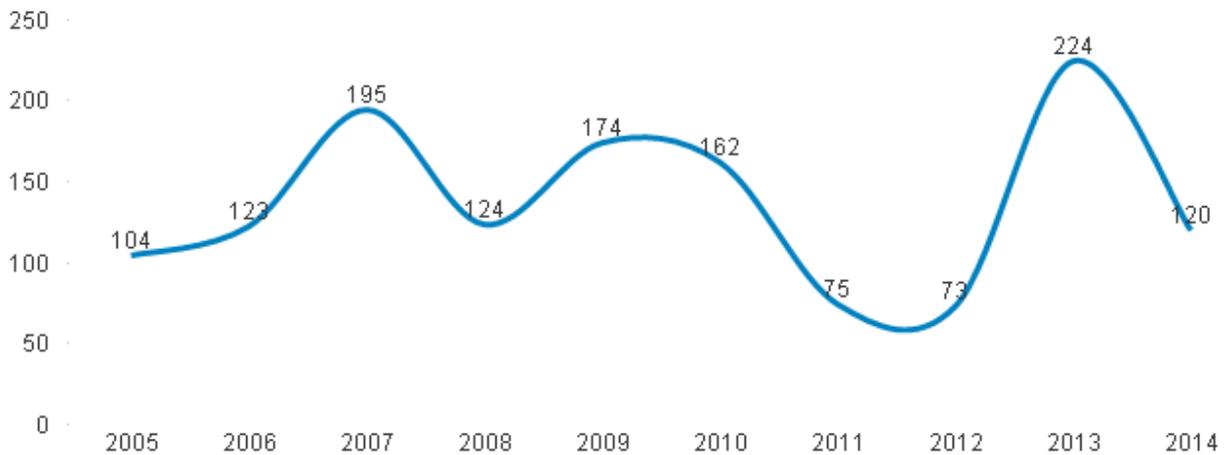
## Woodcock

Whilst the Woodcock is a breeding bird in the county, as can be seen by the peaks in May and June when they are displaying, numbers are boosted by wintering birds from elsewhere hence the peaks in January and December. Annual numbers are quite variable but appear to be stable overall.

### Sighting Counts by Month 2005 - 2014



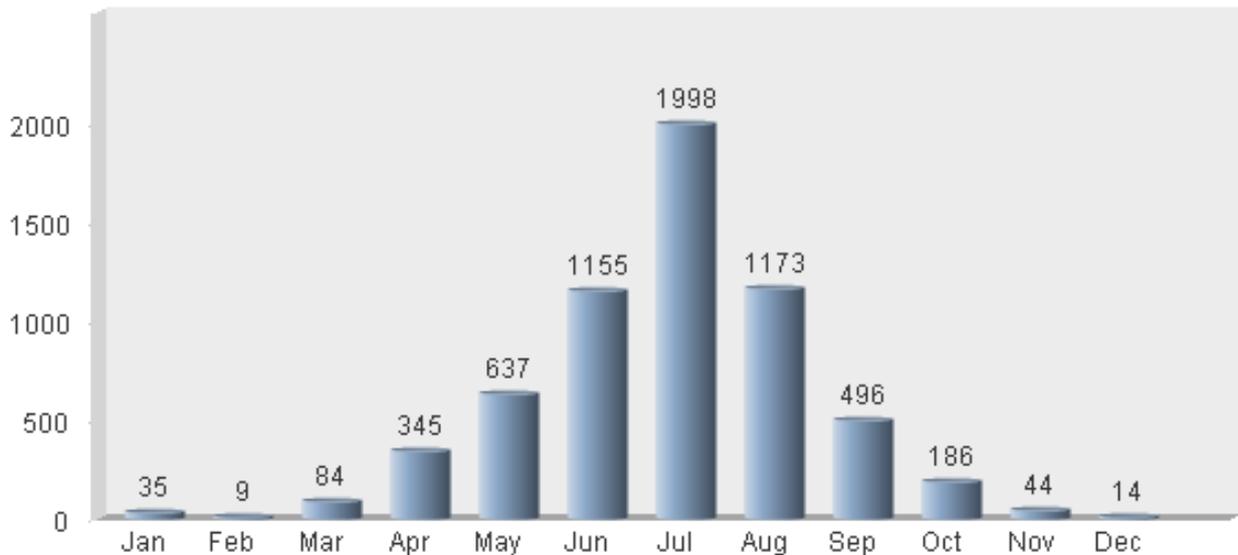
### Records by Year



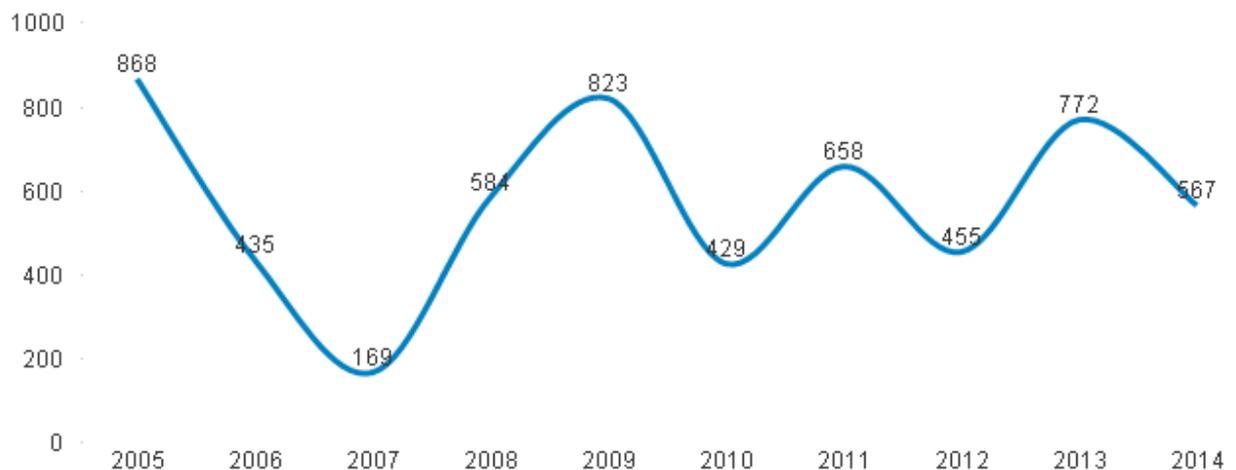
## Black-tailed Godwit

The monthly distribution of this species is unusual for a migratory bird in that instead of two separate peaks in spring and autumn, there is just one in July instead. This is due to birds passing back through the county on return migration as early as July, having already bred on their summering grounds. It also suggests the spring migration route north is different from the return route south due to much smaller numbers being recorded here in March and April. Annual numbers vary from year to year but overall appear to be stable.

### Records 2005 - 2014



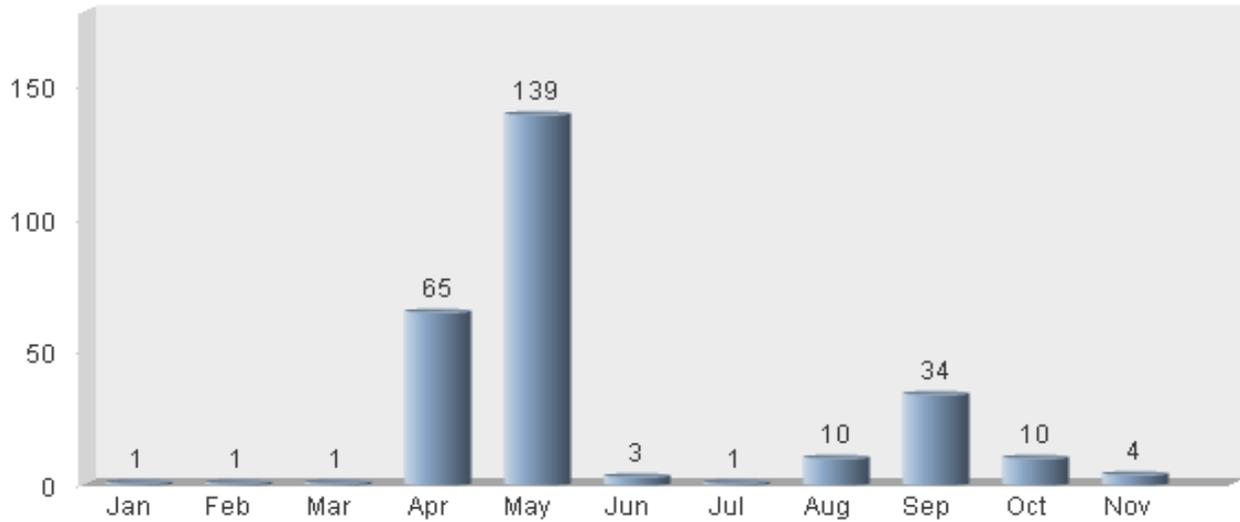
### Records by Year



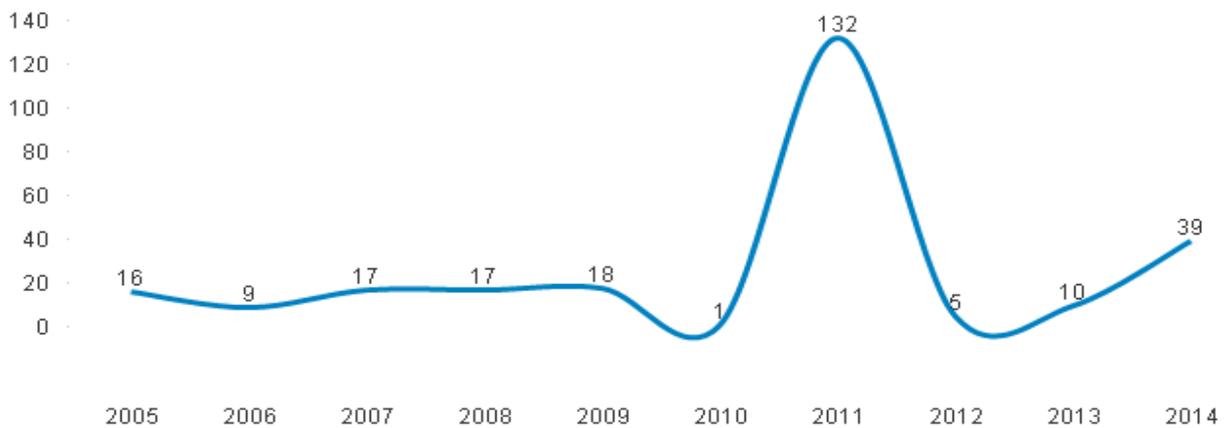
## Bar-tailed Godwit

Bar-tailed Godwit is a scarce passage migrant in the county, with the majority of birds being seen on spring migration. 2011 was a freak year when far more birds were seen, this almost certainly being due to weather factors which caused them to stop off in the county that spring. The April breakdown shows that spring passage birds normally only start arriving here during the last week of the month.

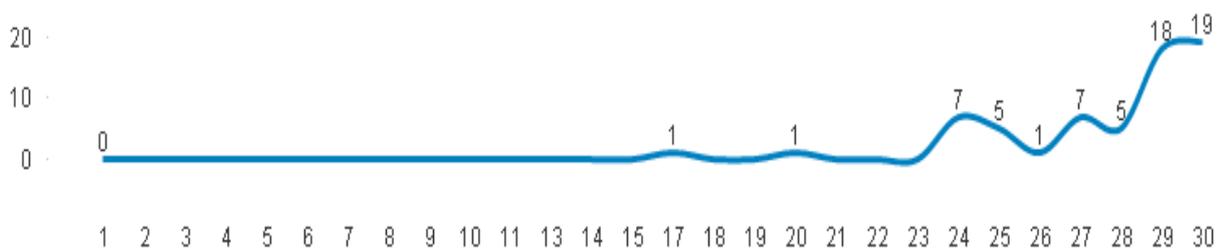
Records 2005 - 2014



Records by Year



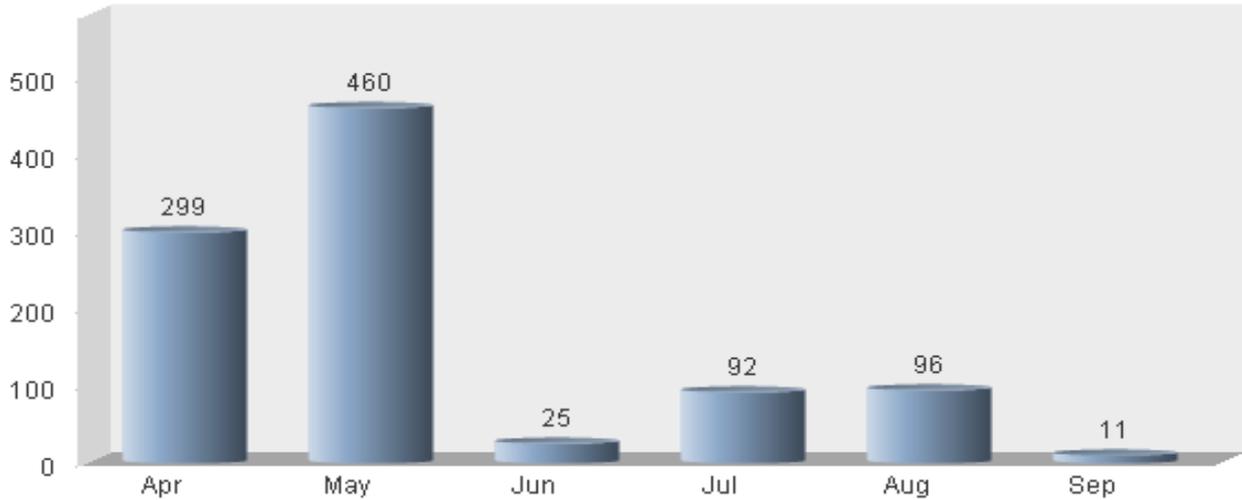
April Records 2005 - 2014



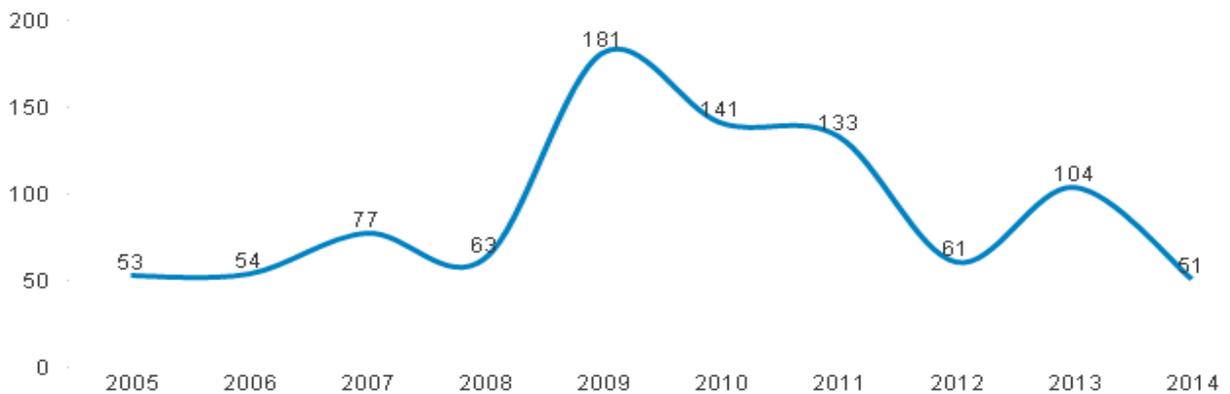
## Whimbrel

Whimbrels are principally a spring migrant in the county, with smaller numbers being seen on autumn migration. Birds typically arrive mid-April onwards. Annual numbers fluctuate quite widely and this will be as a result of prevailing weather conditions during the particular year.

### Records 2005 - 2014



### Records by Year



### April Records 2005 - 2014



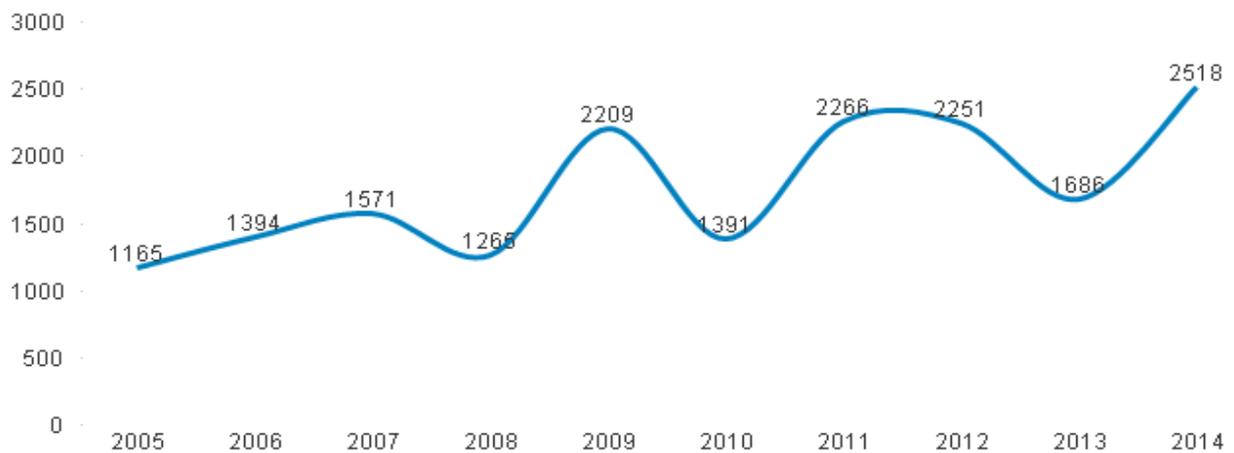
## Curlew

Curlew is a breeding bird in the county, with a good presence during the summer months. The most notable feature of the monthly breakdown is the huge spike in March. This is due to the birds using some reservoirs, particularly Tittesworth, as a staging post on their return from their wintering grounds to their breeding grounds. The total records by year shows an upward trend, but this will be due to more wintering / passage birds being present, since the corresponding totals for just May and June – i.e. the breeding population – shows a fairly static picture. This latter chart is encouraging in itself given the national decline in breeding Curlew numbers.

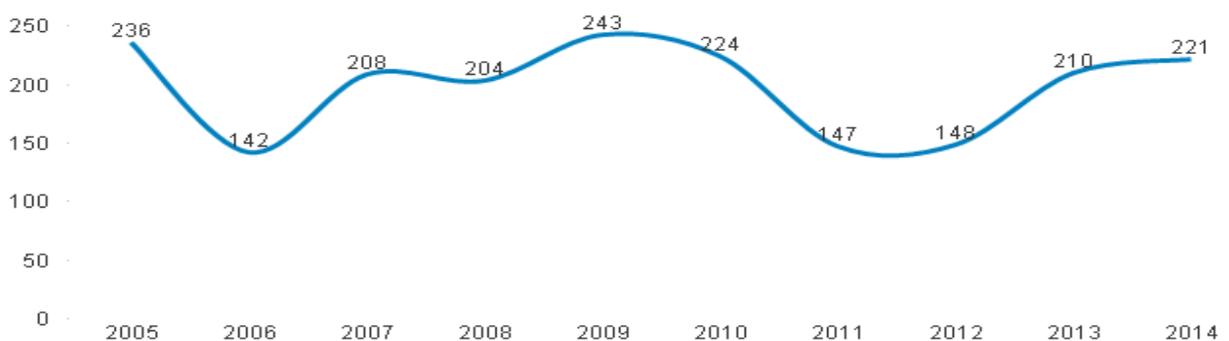
### Records 2005 - 2014



### Records by Year



### Records for May and June



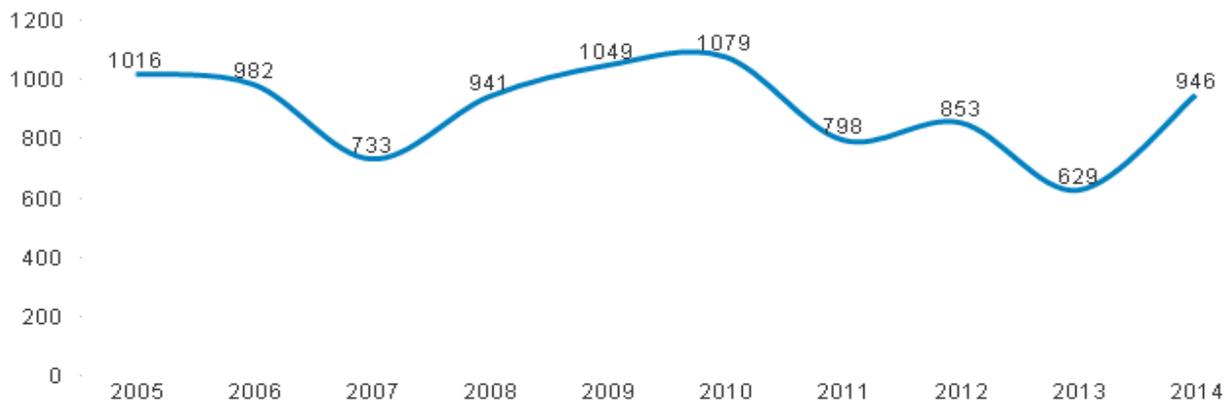
## Common Sandpiper

Common Sandpipers breed in the county in very small numbers but are common on spring and autumn migration, with the peak being on return passage in July and August. The annual counts show that there has been little overall change in numbers during the period examined. There has been a recent trend for one or two birds to overwinter, perhaps as a result of global warming, hence the small counts from the winter months. The arrival of migrants in April is spread out throughout the month with a peak around the 21<sup>st</sup> – 22<sup>nd</sup>.

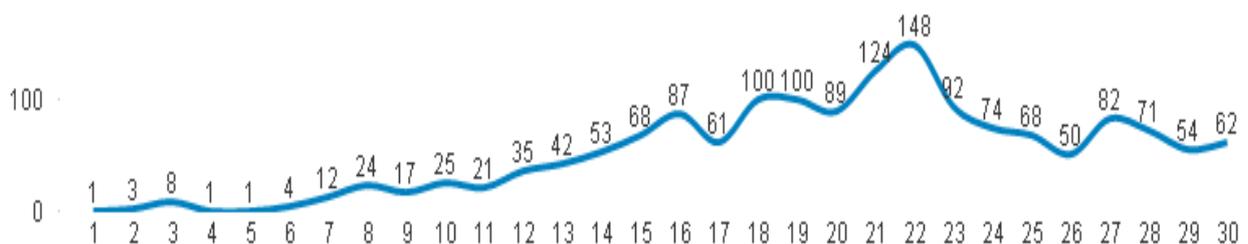
Records 2005 - 2014



Records by Year



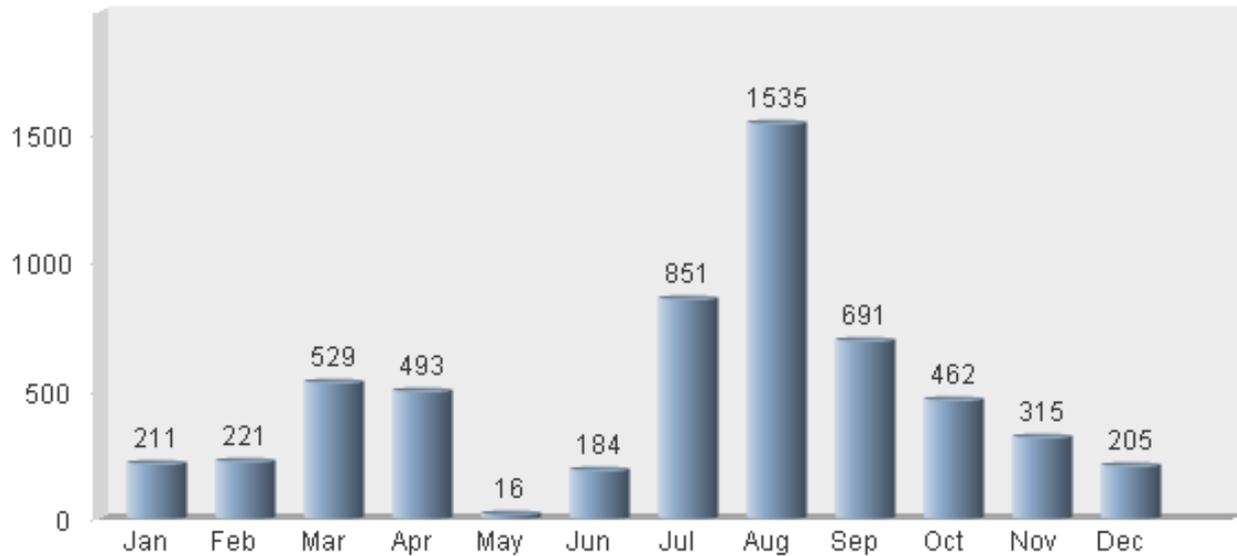
April Records 2005 - 2014



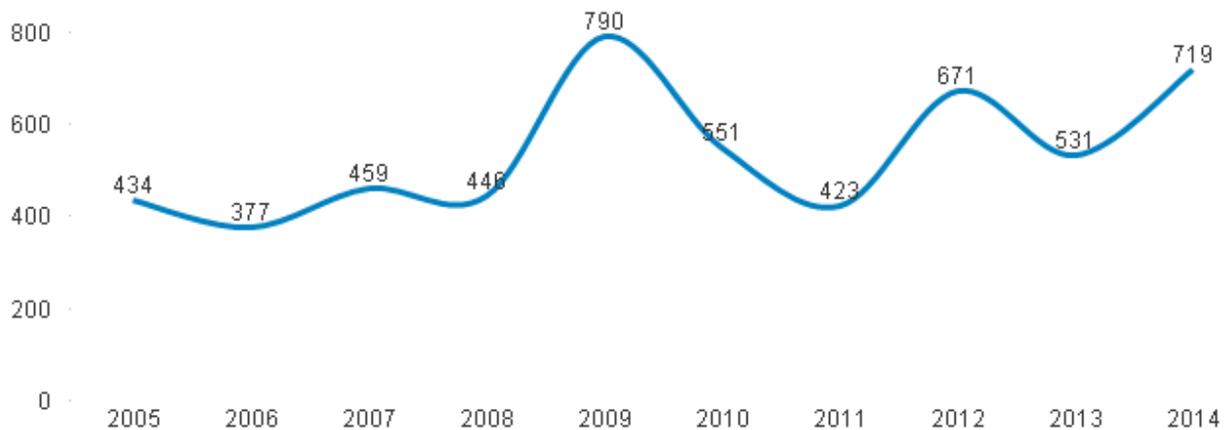
## Green Sandpiper

Green Sandpipers have been recorded in all months of the year but show a peak in August when birds have left their northern breeding grounds and pass through the county on return migration. The annual chart shows an upward trend of birds being recorded each year.

### Sighting Counts by Month 2005 - 2014



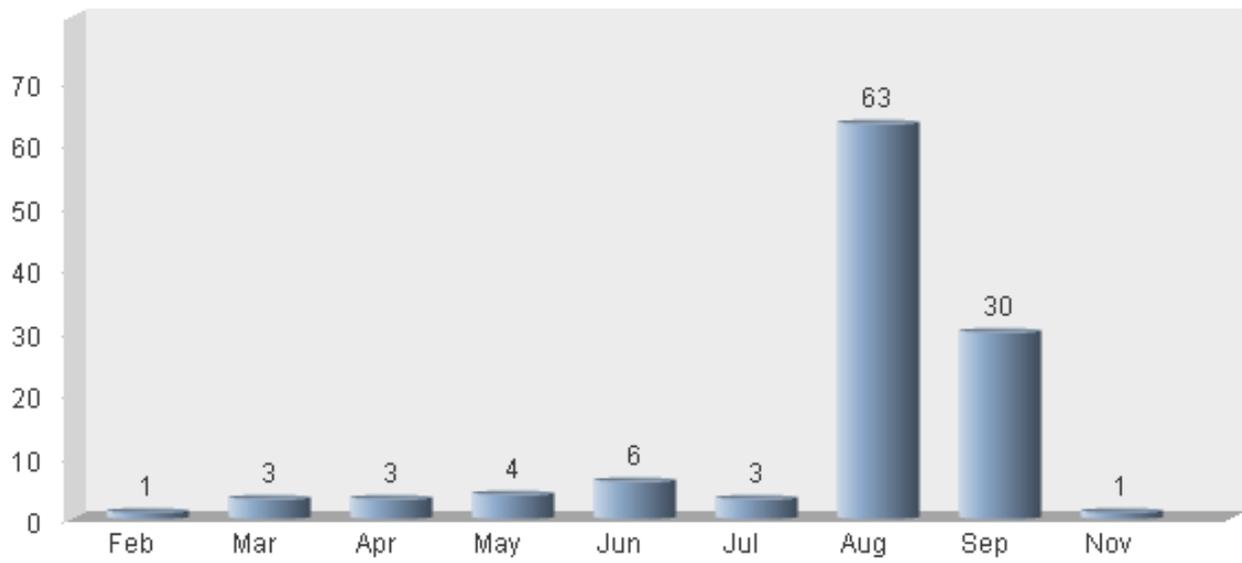
### Sightings by Year



### Spotted Redshank

Spotted Redshanks are scarce visitors to the county but show an obvious peak on return migration in August and September.

Sighting Counts by Month 2005 - 2014



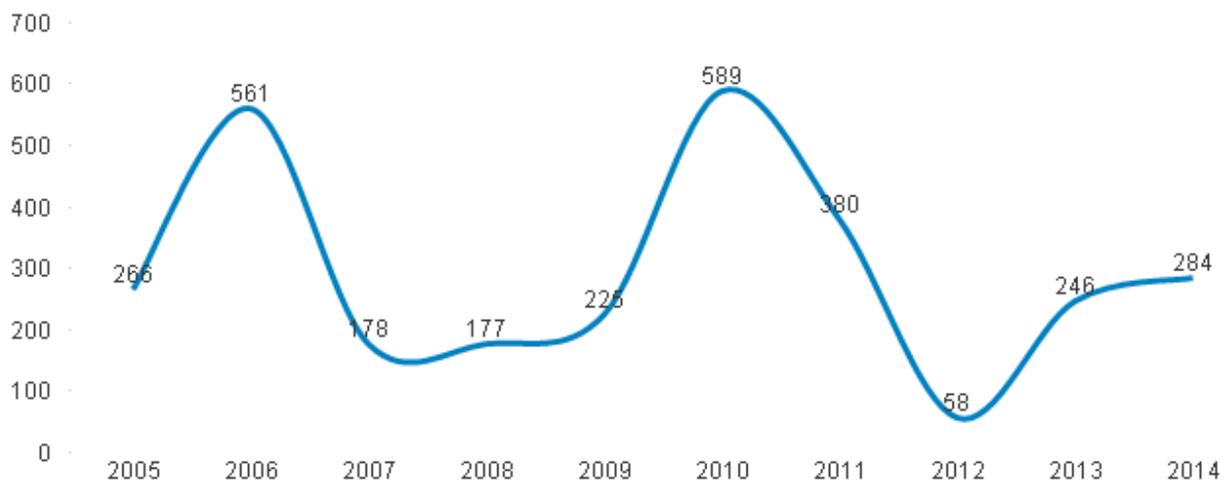
## Greenshank

Greenshanks do not breed in the county and as can be seen from the monthly analysis, they are principally passage migrants with clear peaks in the autumn and spring. Numbers visiting the county each year fluctuate wildly; this being principally influenced by weather factors affecting their migration routes.

### Sighting Counts by Month 2005 - 2014



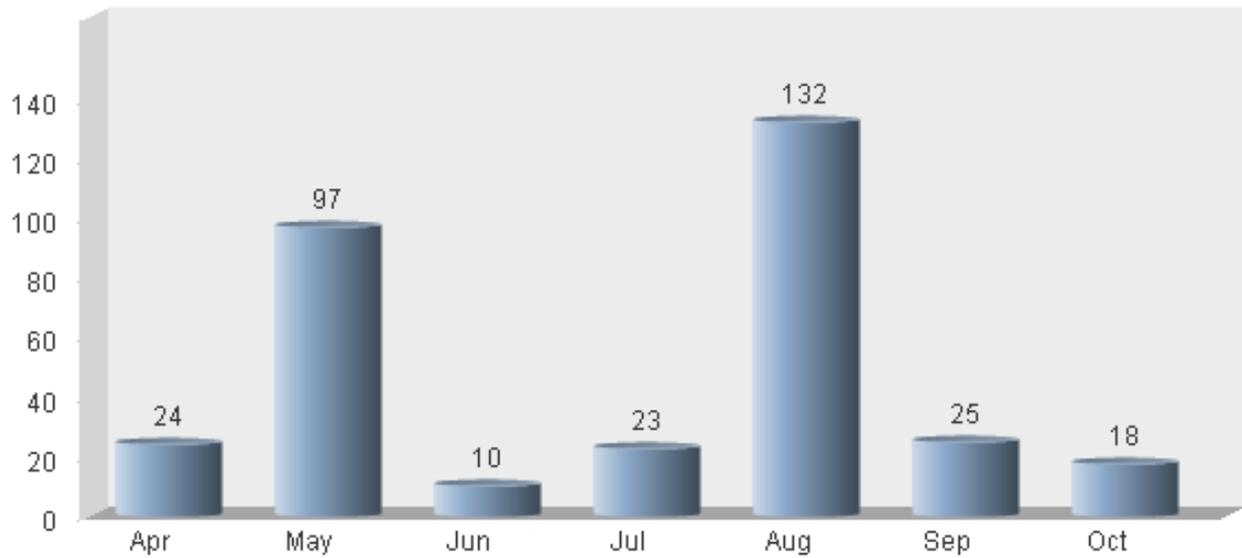
### Sightings by Year



### Wood Sandpiper

Wood Sandpipers are fairly scarce passage migrants, being seen mainly in August and May; they do not breed in the county. The annual chart shows that numbers can fluctuate considerably and like Greenshank, this will be principally due to prevailing weather conditions affecting their migration routes.

Sighting Counts by Month 2005 - 2014



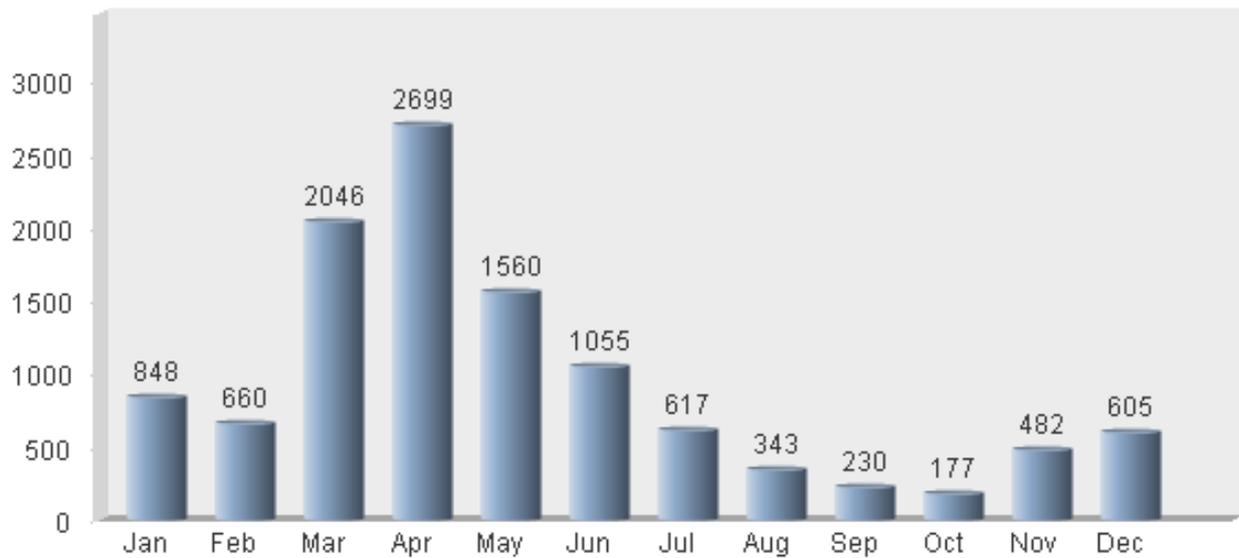
Sightings by Year



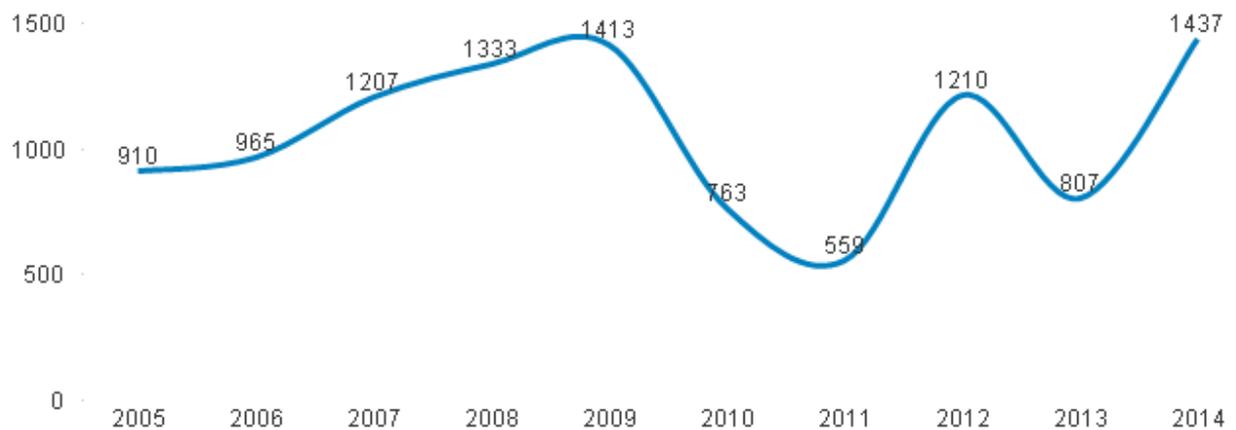
## Redshank

The monthly totals for Redshank are a curiosity and bear no resemblance to other wader species. Whilst it breeds in the county in small numbers, there appears to be a strong movement of birds through the county in spring, presumably passage migrants, but instead of an expected peak in the autumn for return passage, the months of August – October hold the fewest numbers. The annual totals appear to be increasing but like other species, there was a notable dip in 2010/2011 due to the very cold winters causing birds to move elsewhere.

### Sighting Counts by Month 2005 - 2014



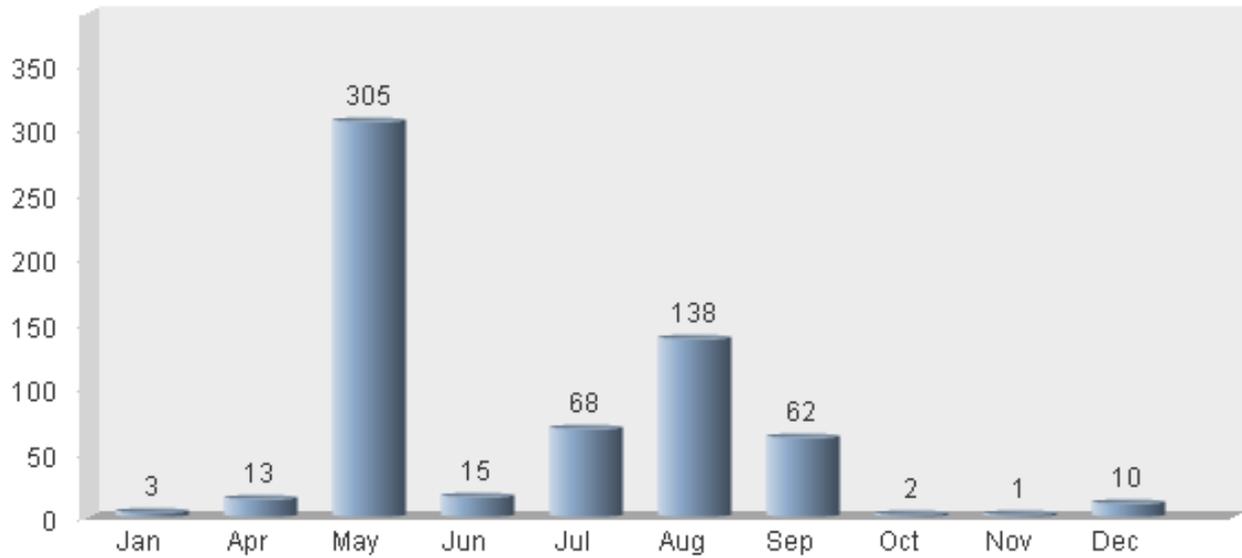
### Sightings by Year



## Turnstone

Turnstones do not breed in the county and are principally spring and autumn migrants as can be seen from the monthly breakdown. A few however, do turn up in the winter months although none have been recorded in February and March. The annual counts vary quite widely.

### Sighting Counts by Month 2005 - 2014



### Sightings by Year

