

RATCHEUGH WILD BIRD SURVEY.

REPORT FOR YEAR 17.

NOV. 2015 – NOV. 2016.

Aims of the survey.

The survey began in Nov.1999 and is aimed at attempting to assess the effect on the wild bird population by Northumberland Estate farming and gamekeeping management, in an area of arable farm land where some crops have been grown for the food and shelter of both wild and game birds. One particular aim is to see if an increase in wild Grey Partridge can be achieved, sufficient to allow for some sustainable shooting.

It is recognized that the population of any species can vary dramatically from year to year for many reasons. This is an attempt to record any trends in population change over a number of years.

Seventeen years of the survey have now been completed. It is inevitable that there have been changes in that time to the area under survey. Northumberland Estates entered the Farm Stewardship Scheme in 2003 when measures were introduced to aid wildlife conservation, including the establishment of field margins and changes to hedgerow management etc. In 2004 more intensive gamekeeping commenced to further encourage the Grey Partridge population. Predators are now actively controlled and extra feed and shelter provided. Small numbers of hand reared Partridge have been released, these from home bred stock, which have not noticeably affected the survey to date.

These changes have given the survey an opportunity to compare bird populations before and after the management changes in 2003/4

Area of Survey.

Ratcheugh Farm is approx. 290 hectares and lies mainly to the east of Ratcheugh Crag. Most of the fields are exposed to the east coast, a mile or two away. Snableazes Farm which is approx. 100 hectares, is on the west side of the Crag, which provides some shelter from the east. The woodlands on the Crag and in Snableazes Covert are not included in the survey, which is restricted to the arable fields, their boundary hedges and hedgerow trees.

At the start of the survey some areas had been sown to crops for bird feed and were already attracting some wintering Finches, mainly Linnet. During the course of the survey there have been changes, more areas have been given over to game plots with a variety of crops, including Triticale, Linseed, Kale, Quinoa, Mustard, Chicory and others.

The Farm rotation of crops has been followed with interest, showing that the breeding territory of some species moves with the rotation.

Two small ponds have been established, there is also one very small area of wet land within the survey area.

Beginning in 2003, with the start of the Farm Stewardship Scheme, an increasing number of field margins have been sown with grass seed mixtures and hedgerows are less frequently cut.

Methodology.

In order to make comparative counts as accurate as possible recording is carried out by walking the same route and spending the same time at each visit. Six visits are made each year. These are-

Winter period, November

January

February

Summer period, May

June

July

Visits are made at approx the same time of day and on days that are not too windy or wet when observation is much more difficult and comparative counts are impossible. Recording is carried out by visual observation and song/call recognition.. Although all species are recorded, the target species for the survey are those which normally feed and breed on arable land and in the adjoining hedges and hedgerow trees.

Achieving the Aims.

The aims of the survey will only be achieved if a comparison can be made between the results of this survey and average populations in similar areas. An attempt is being made to do this. More useful information is now available and it is hoped that the conclusions made will be increasingly accurate. The most important factor is the comparison of counts during the breeding period.

Graphs.

Graphs can easily mislead. Six visits per year produce only a small amount of data on which to base a survey, taking into account all the vagaries of weather and other variables which can affect counts.

Target species graphs for the breeding periods to 2016.

No counts were carried out during the breeding season of 2001 due to Foot and Mouth restrictions, which tends to give a depressing effect in the early years of the survey.

All British species are classified into three groups which are indicated with the details of each species as follows. **Black** listed, for those which are not endangered.

Amber listed, for those where there is some concern.

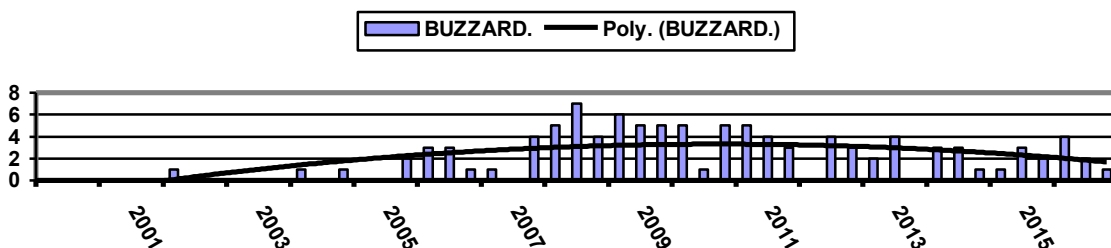
Red listed for those which are at greatest risk.

The UK National average changes in population are shown as – (latest update – 2014)

A (The percentage change between 1995 – 2013)

B (The estimated percentage change between 20013 – 2014)

Further information is available from the latest Bird Atlas for the UK from the British Trust for Ornithology (**BA**) and the Northumbria Bird Atlas from the Northumberland and Tyneside Bird Club. (**NBA**)

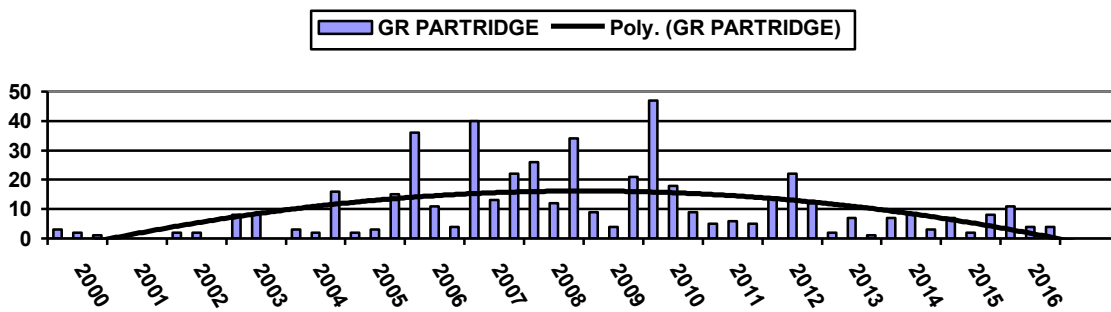


The Buzzard graph follows very closely the National trends during the period that numbers have increased dramatically with movement from the west. Counts now seem to have stabilized, possibly at the optimum number of breeding territories in Northumberland. (NBA)

Black listed. (A) +75% (B) +3%

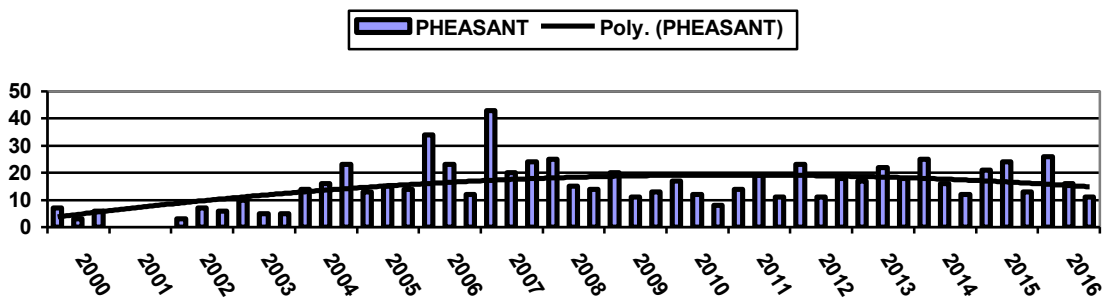
Kestrel counts continue to decline slowly, this is in line with National figures. Intensive agriculture and the widespread use of Rodenticides are mainly held to be responsible. In woodland areas the increase in Goshawks is blamed in part for the decline. In east Northumberland an increase in numbers has been recorded (NBA) which is not indicated in our counts.

Amber listed (A) -40% (B) +6%



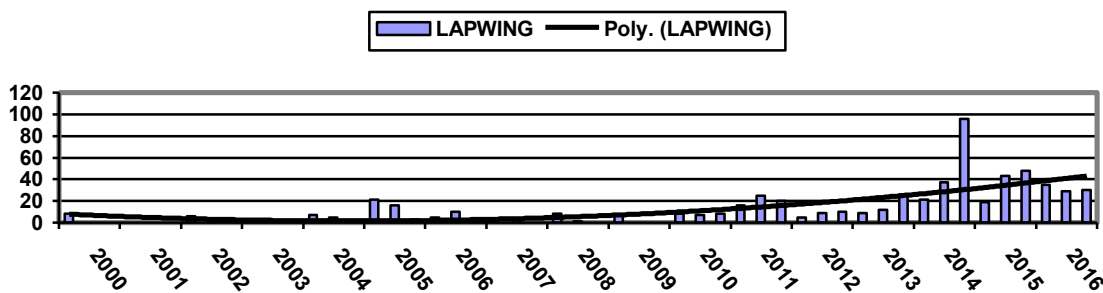
Counts of Grey Partridge made by the gamekeepers later than the July records will probably give a more accurate figure. Although counts in 2015 showed a rise in numbers, results in 2016, when breeding was very late, do not look good. Any counts made later in the year may have given better results. (NBA) shows a definite increase in numbers in the north east of the county. Highest counts being mainly in the coastal region (NBA)

Red listed. (A) -59% (B) -9%



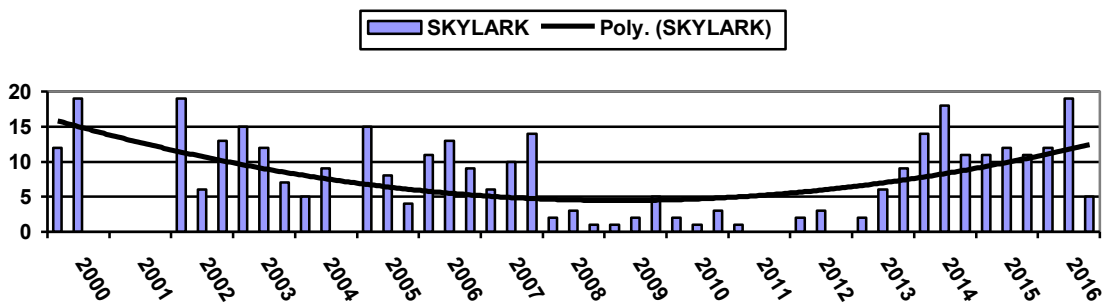
Little change from previous years. Although there are no releases of hand reared Pheasants at Ratcheugh, numbers have again been maintained well, despite some shooting. Counts can be very misleading due to massive releases of hand reared Pheasants for shooting in the area.

Black listed. (A) +31% (B) +3%



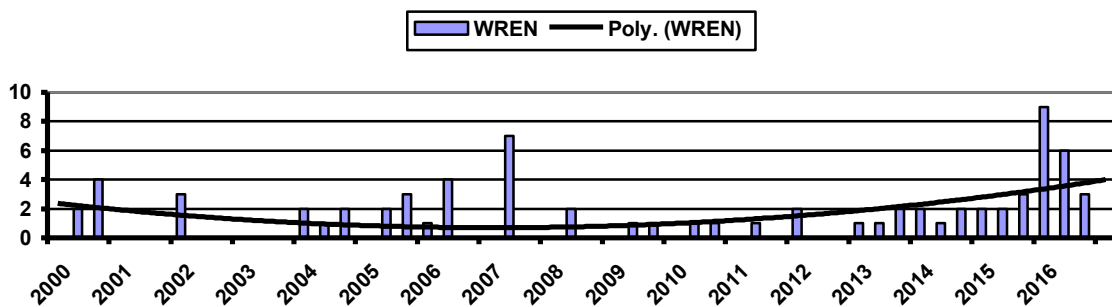
There has been a further increase in the area of ground left as stubble which is a very suitable nesting habitat, the effect is shown in Lapwing numbers. The national average has shown a small increase in the last two years but nothing to compare with the rise here. Most losses in Lapwing numbers have been on the western side of the UK. The (NBA) illustrates the Lapwing increase in the Alnwick area.

Red listed. (A) -45% (B) +2%



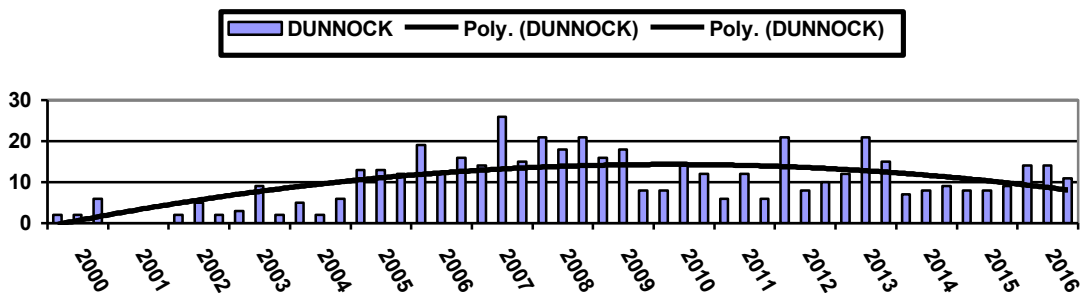
Skylarks continue to show a benefit from the increase in stubble area. A clear indication that the right habitat is all important. (BA) shows that most Skylark losses have occurred in Ireland. (NBA) shows more gains on the Northumbrian coast than losses but these are outstripped by the percentage gains made recently at Ratcheugh.

Red listed. (A) -24% (B) -15%



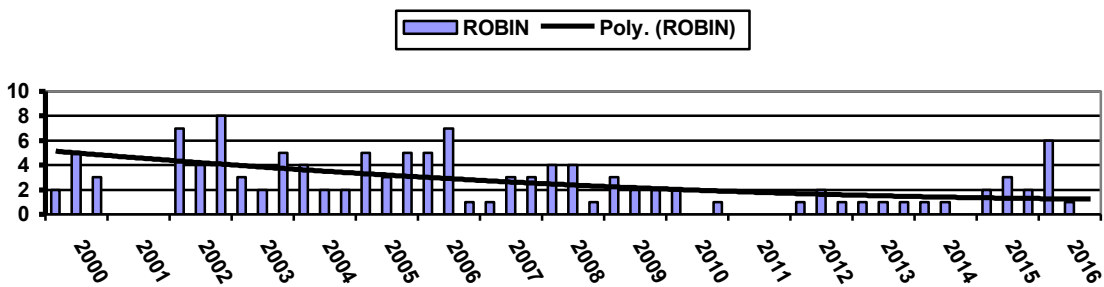
After a period of severe winter weather and poor breeding seasons, Wren numbers have slowly risen to their highest point in the last eight years. Wren numbers can fluctuate so quickly that the atlases do not keep pace with the changes.

Black listed. (A) +34% (B) +2%



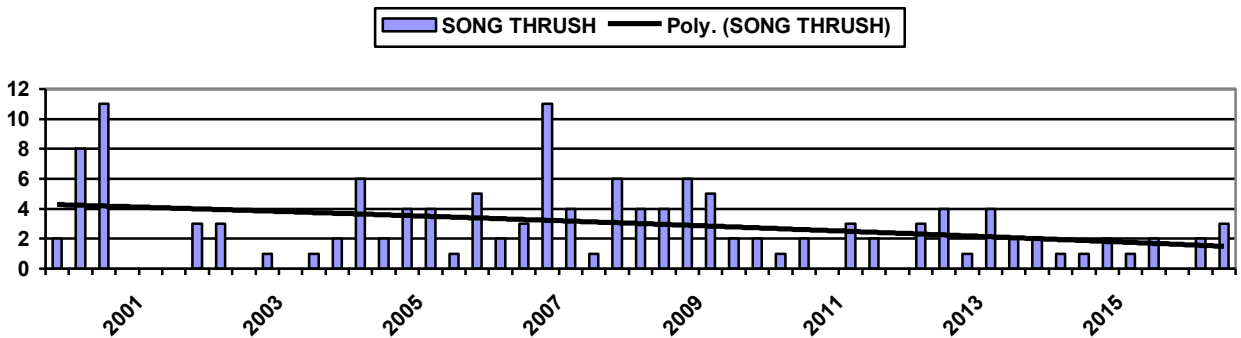
The increase in population nationally is due to the spread of this species into new areas in the west. (BA) Population numbers here tend to have levelled off or increased slightly. (NBA)

Amber listed. (A) +21% (B) +2%



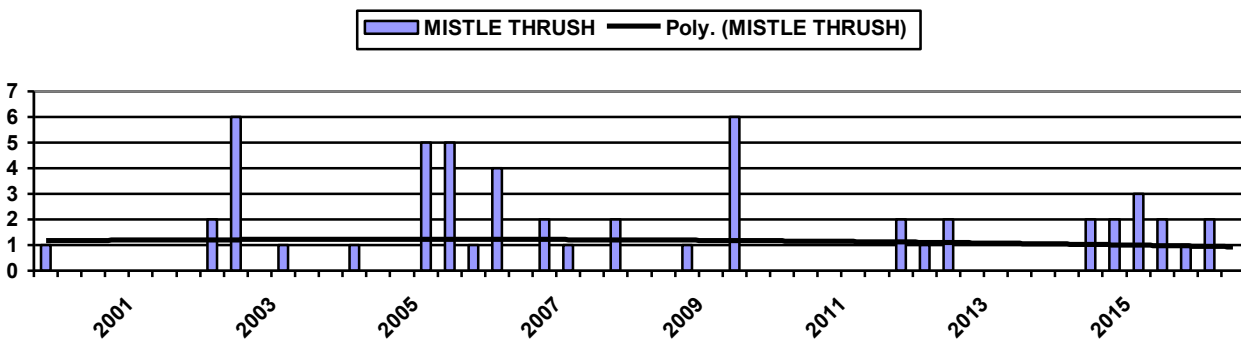
A higher count of Robins in 2015 and 2016 than in the severe years of 2010 and 2012 would seem to indicate that Robins suffered more severely than was recognised. Similar to Wrens, this is the highest number recorded in the last eight years and may indicate a gradual return to a healthier population.

Black listed. (A) +11% (B) +7%



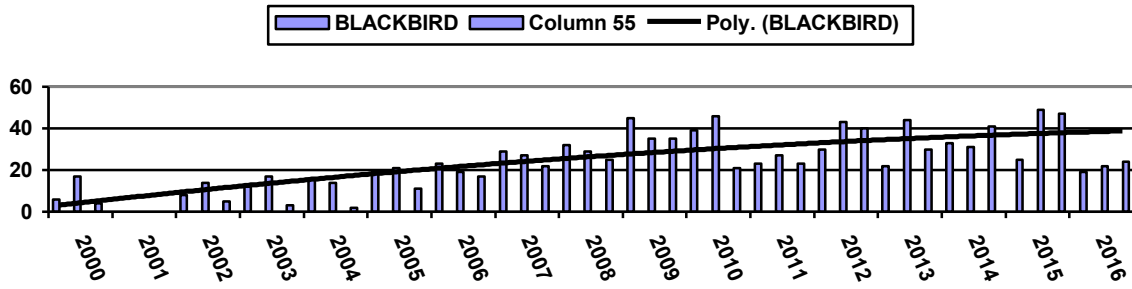
Following the national decline in population counts numbers now appear to be stabilizing, although the number of Song Thrushes in arable parts has always been lower than urban or more wooded areas. (NBA)

Red listed. (A) +5% (B) -3%



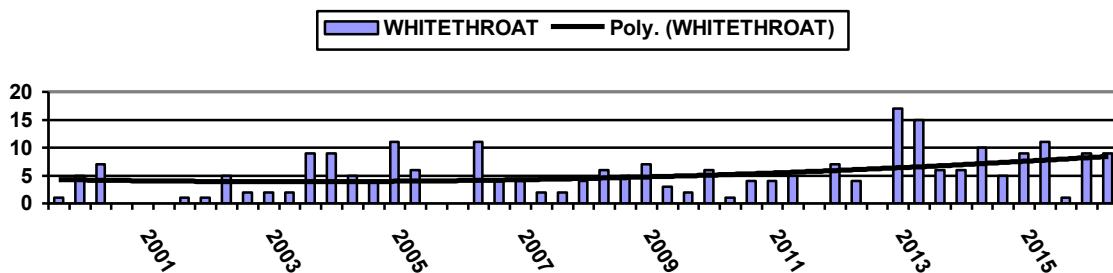
Little change. Only one pair of Mistle Thrushes have been recorded here with occasional family groups and would easily be over looked on some visits. Again, small numbers can result in misleading graphs. Nationally there has been a gradual decline in numbers over a period of years but the last two years have shown signs of a recovery. (BA) Like the Song Thrush, arable areas of the county have a lower population of Mistle Thrush. (NBA)

Amber listed. (A) -31% (B) +19%



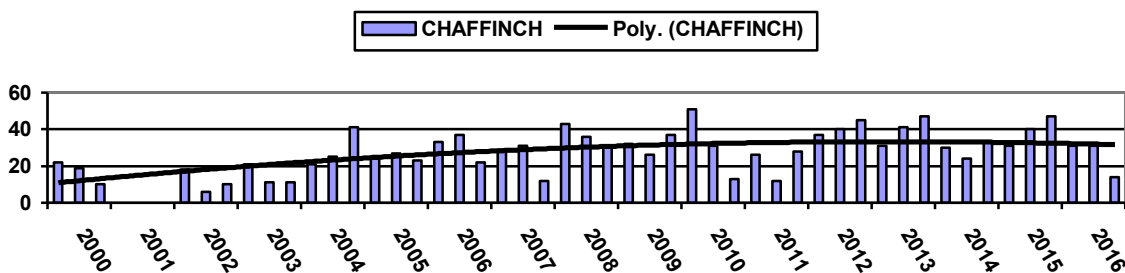
National figures show that there has been a steadily growing population for a number of years. (BA & NBA) In the survey area there has been an increase of much larger proportions during the last fifteen years. They have probably benefited from the provision of food and predator control provided by the Estate and are well adapted to withstand poor weather conditions.

Black listed. (A) +21% (B) +5%



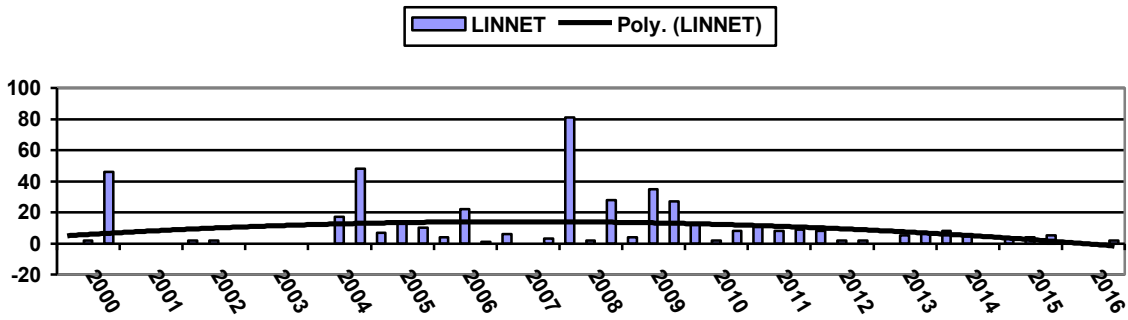
Whitethroats have again arrived in good numbers, continuing a revival. Our counts continue to follow the national trend. Being migrants, they are subject to other extremes of weather or food shortage when in their African winter sites south of the Sahara, which can result in dramatic reductions in numbers returning to breed.

Amber listed. (A) +38% (B) +18%



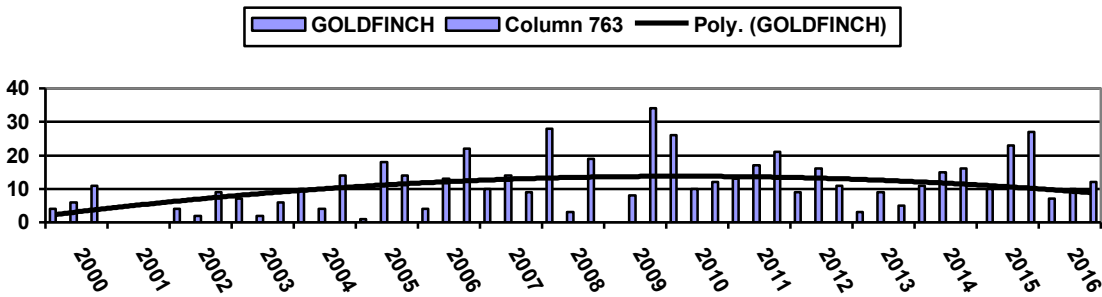
Chaffinches appear to have reached a more constant population level. They have at least doubled their numbers since the start of the survey, whereas the national averages indicate only a slow increase in numbers. (BA) Similarly with the county averages. (NBA)

Black listed. (A) +7% (B) -5%



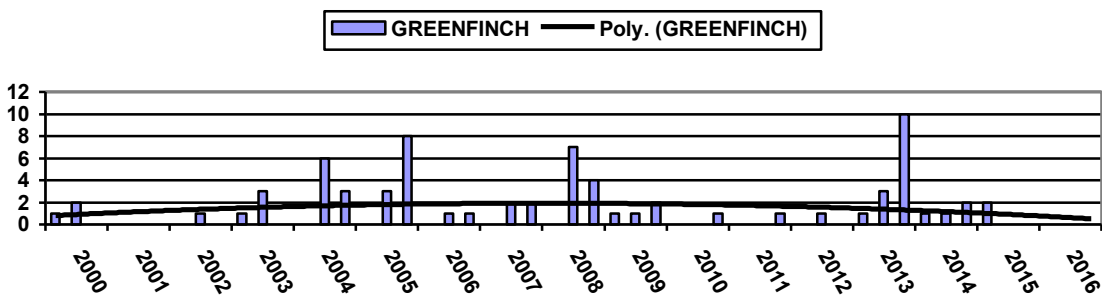
There are very few suitable breeding sites for Linnets in this survey area, since they prefer areas of more dense bush, the most popular being Gorse thickets. Nationally they are in decline which would agree with survey figures.

Red listed. (A) -29% (B) +7%



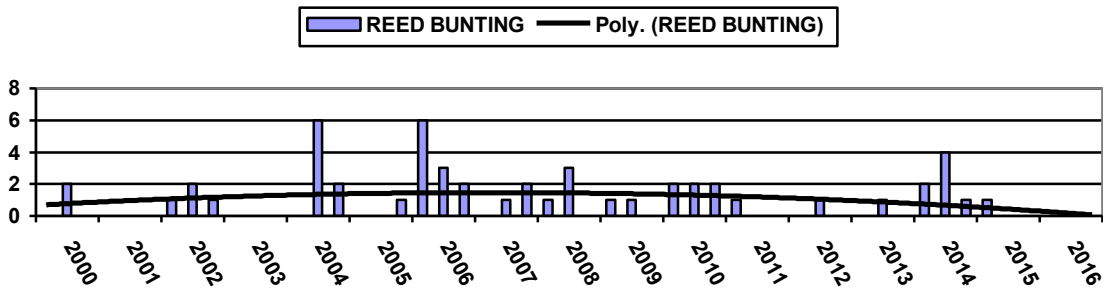
Goldfinches in the survey area are following both the national and local trends, In the NBA area there has been a higher increase in numbers than most other parts of the country. They continue to extend their breeding range to the north of Scotland.

Black listed. (A) +111% (B) +4%



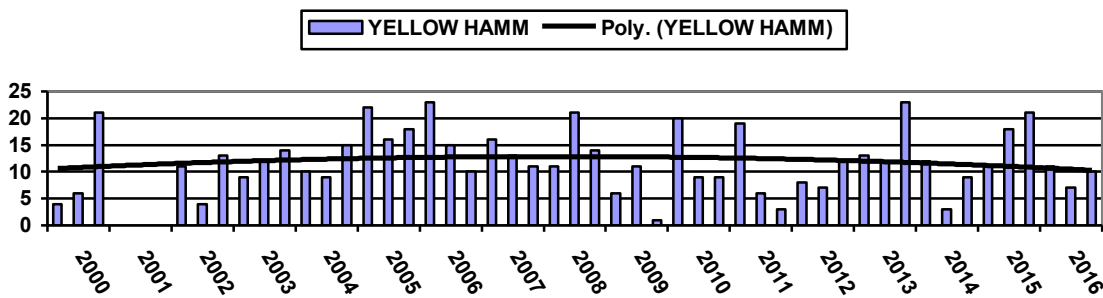
No records of Greenfinch have been made in most of 2015 or 2016, which follows the national trend. Losses of birds are partly due to the disease trichomonosis. This is another species which is increasing in urban gardens. (NBA)

Black listed. (A) -32% (B) -14%



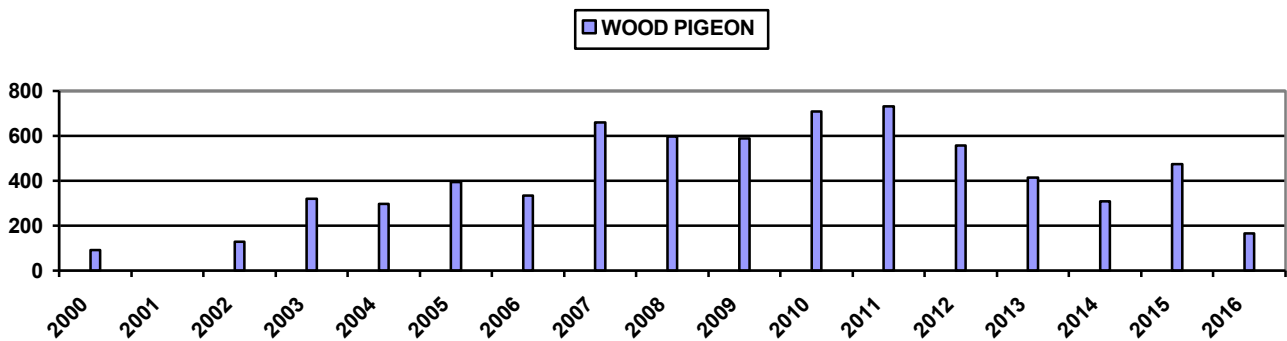
There is very limited scope for Reed Buntings to breed here with practically no suitable habitat for them, although more Reed Buntings are recorded adopting oil seed rape crops as an alternate breeding site. (NBA) There were no records of Reed Bunting in 2016.

Amber listed. (A) +19% (B) +13%



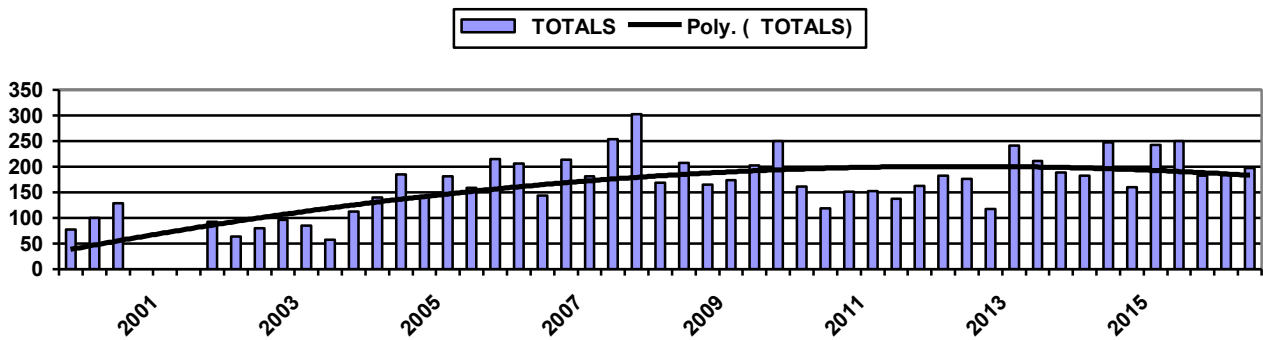
Yellowhammers seem to be holding their own on the east coast with most losses occurring on the west of the country. In the survey area numbers are higher than the average for the north east.

Red listed. (A) -15% (B) +6%



The lowest count of Woodpigeons was made in 2016 for the last fourteen years.

Black listed. (A) +37% (B) -10%



Indications are that during the period of the total survey numbers have risen from the early years and are now maintained at a more constantly higher level.

Conclusions from the breeding period counts.

Weather conditions during the breeding period of 2016 have again not been the best. Low night time temperatures continued into the summer period which created a shortage of insect life necessary for the survival of most nestling birds. This resulted in a late start to breeding. Later broods fared better.

There is little change in the following table.

The results of this survey compared with national averages shows that eight species have performed very well:-

- Grey Partridge. (Red listed)
- Lapwing. (Red listed)
- Skylark. (Red listed)
- Blackbird.
- Chaffinch.
- Yellowhammer. (Red listed)
- Woodpigeon.
- Wren.

The following have performed equally as well as the National averages:-

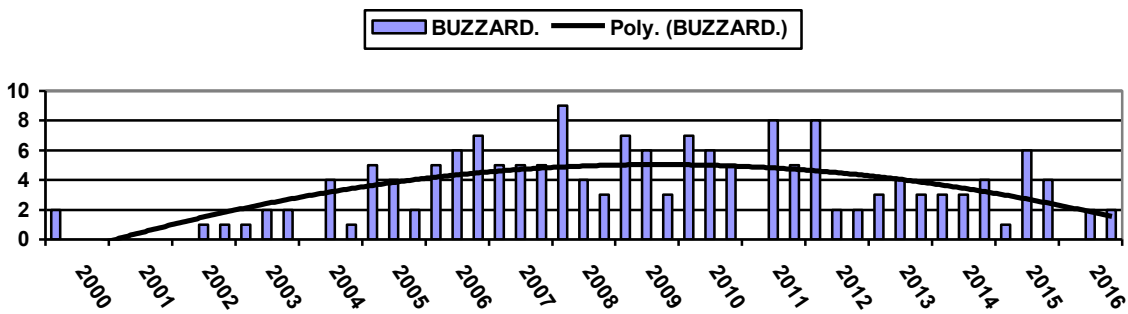
- Buzzard.
- Kestrel. (Amber listed)
- Pheasant.
- Song Thrush.(Red listed)
- Mistle Thrush.(Amber listed)
- Whitethroat.(Amber listed)
- Linnet. (Red listed)
- Goldfinch.
- Greenfinch.
- Dunnock.(Amber listed)

The following have not performed as well as the National averages:-

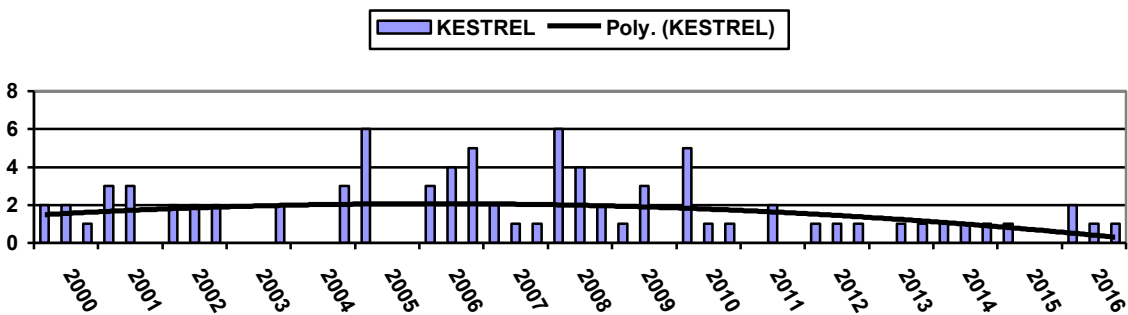
- Robin.
- Reed Bunting.

Target species graphs for the winter periods.

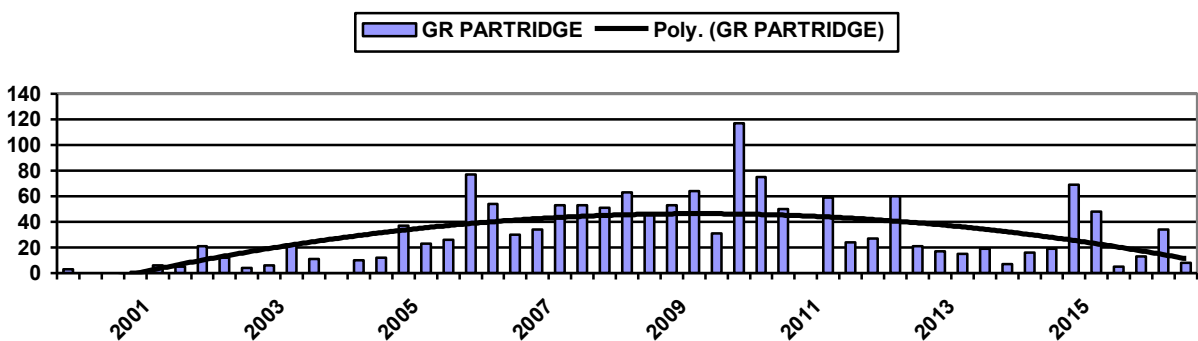
No figures are available from National sources to use as a comparison with the winter counts. It was not possible to make any counts in Jan. 2011 because of severe weather with a long period of complete snow cover, when disturbance to birds was considered to be detrimental.



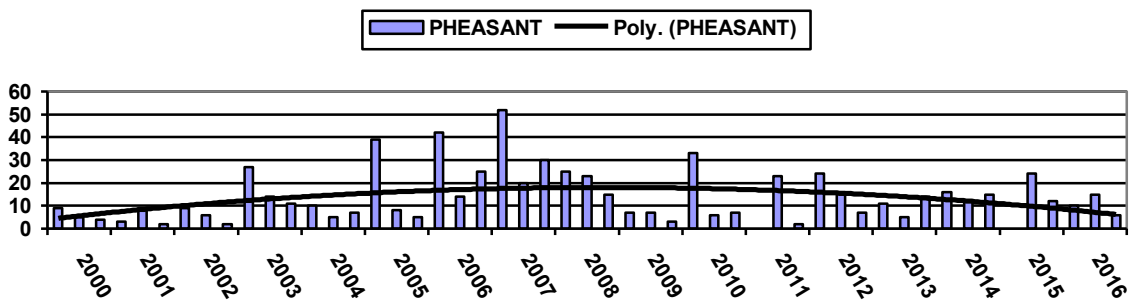
Average numbers for Buzzard remain fairly constant, supporting the reasoning that the population has now settled at a sustainable level, after the huge build up in numbers from the west. Buzzards are a sedentary species with very little movement during the winter months.



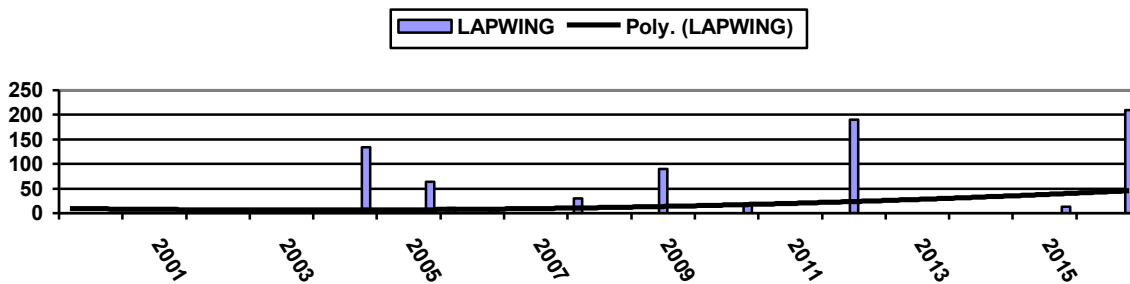
The graph illustrates the continued fall in Kestrel numbers, no longer our commonest bird of prey. See the summer graph for more details.



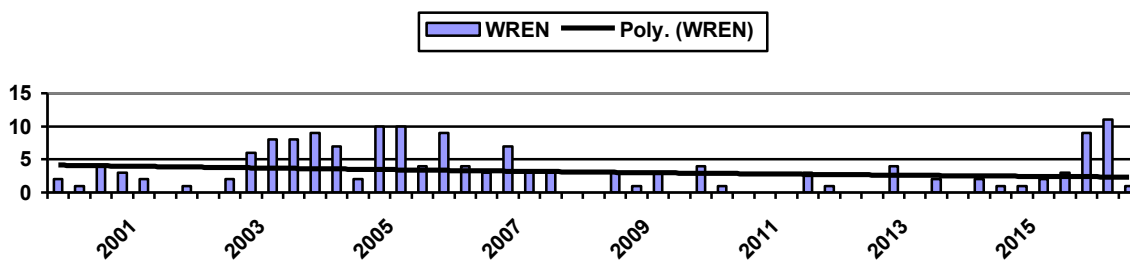
There has been a gradual reduction in counts of Grey Partridge since 2011. Severe winter weather in that year followed by a series of poor breeding seasons and some shooting appear to have reduced numbers at Ratcheugh but the population is still being maintained at a higher level than the national average.



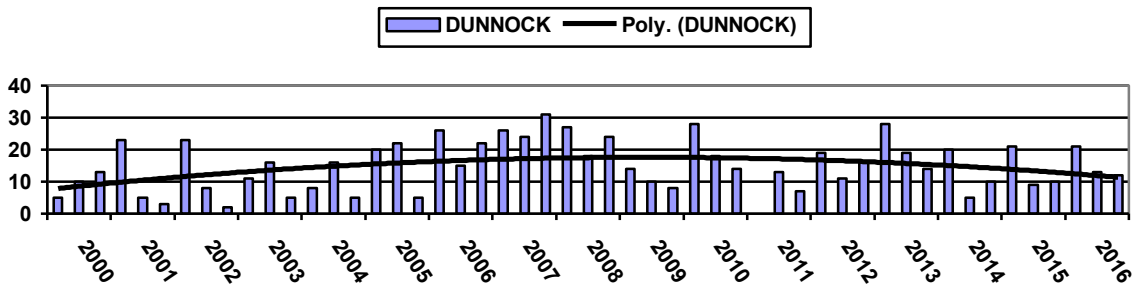
Pheasant records have followed the same pattern as Grey Partridge. No hand reared birds have been released here for a number of years but there are bound to be stray birds from neighbouring shoots which are now breeding at Ratcheugh. There has been some shooting.



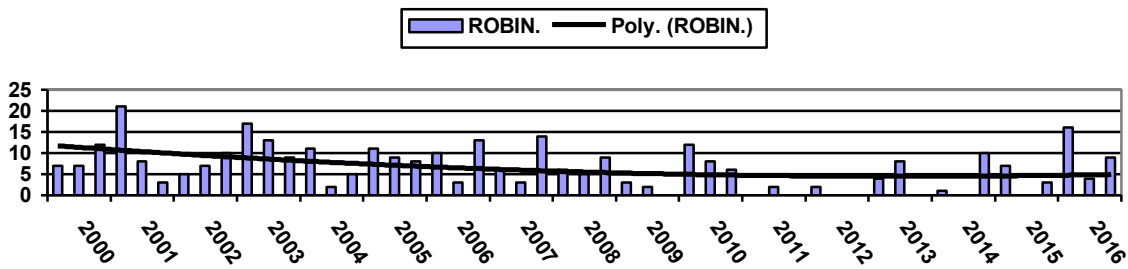
In winter Lapwings flock together and spend most of their time feeding at the coast or further south, to be replaced by migrants from further north. In severe weather they will move to more sheltered areas a little way from the coast as is illustrated by the occasional large groups at Ratcheugh.



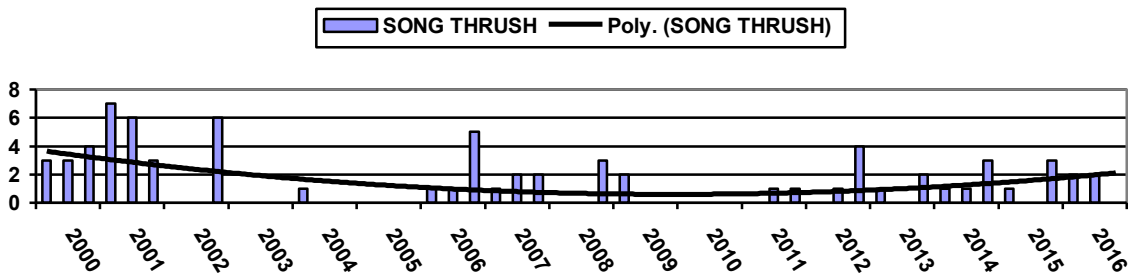
There has been an increase in Wren numbers this year. Although it is mainly a woodland species records from Ratcheugh in 2003/6 show that a higher population can be maintained here if conditions allow.



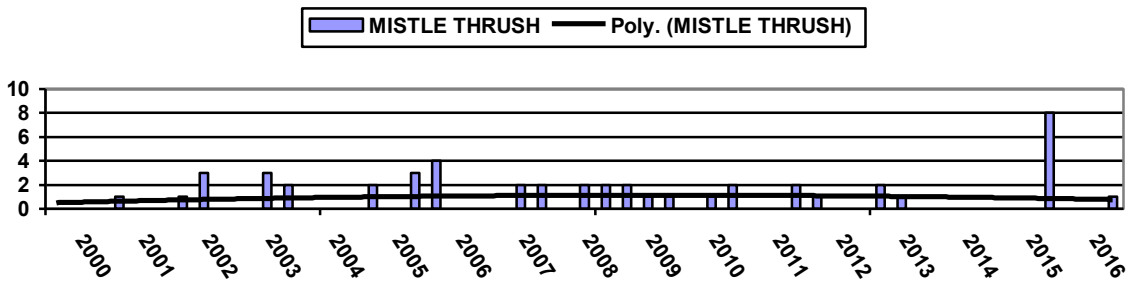
As in the summer period the number of Dunnocks recorded here is gradually falling. There is normally little movement of this species during the winter. It may be becoming more of an urban garden bird.



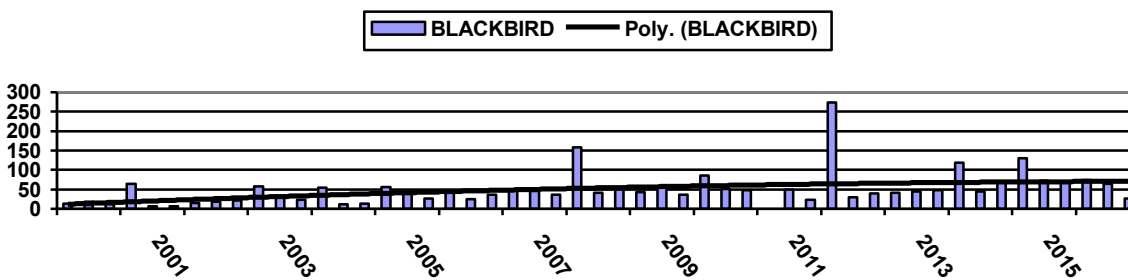
There has been a better count of Robins during the winter months this year, hopefully the start of an improving population. Winter populations are bolstered by migrants from northern UK or Europe.



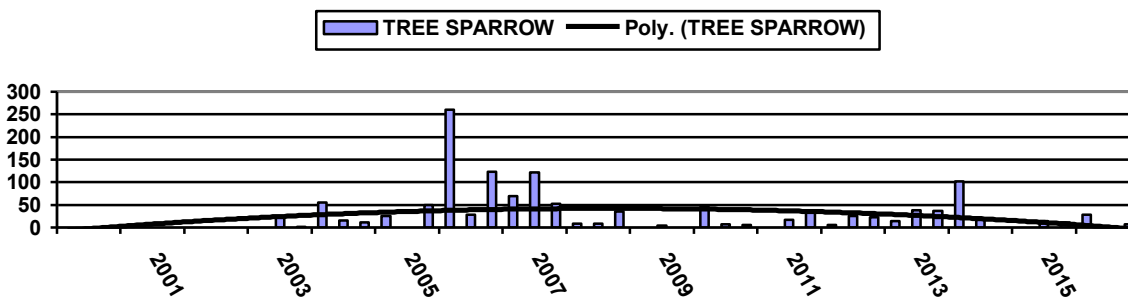
Winter numbers may have been increased by an influx of winter migrants from the north.



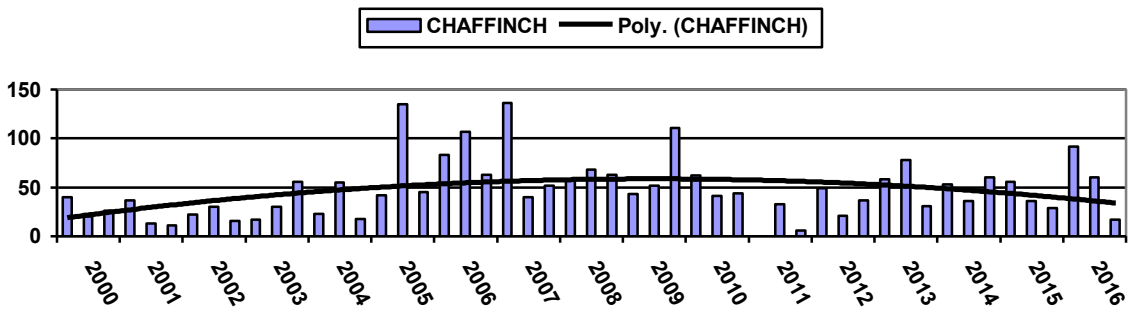
The one pair of Mistle Thrush recorded here is not enough to produce figures which could indicate any population trend. The record of eight birds in Feb. of 2015 was one family group.



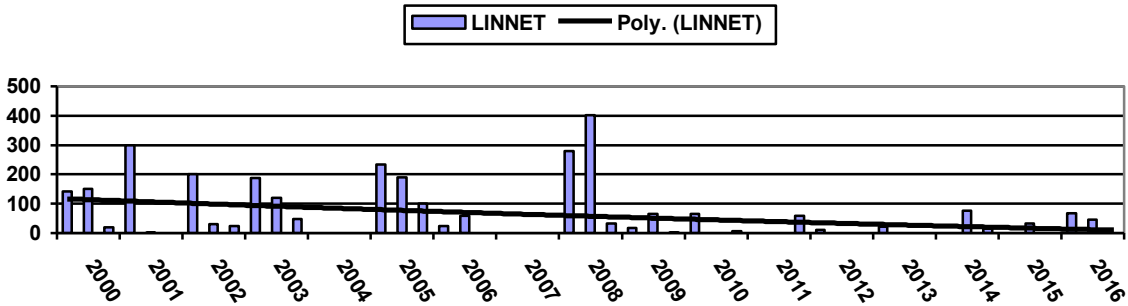
A continuing increase in blackbird numbers arriving here in the winter. The first count of most years clearly shows a much higher number of birds arriving from Europe and being recorded here, before they become more widely scattered throughout the rest of the UK. If the one very high count in 2012 was removed from the graph it would give a much better defined picture of the situation.



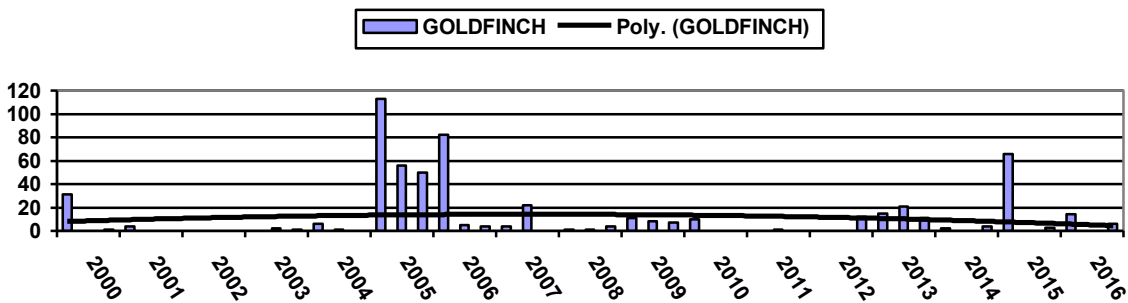
As for other finches in the winter the graph illustrates how they were more concentrated into the fewer areas of available feed in the 2005/7 period, after which more feed areas were provided and finch flocks became more fragmented and more widely spread. I do not believe that the overall number of Tree Sparrows wintering in this county has declined.



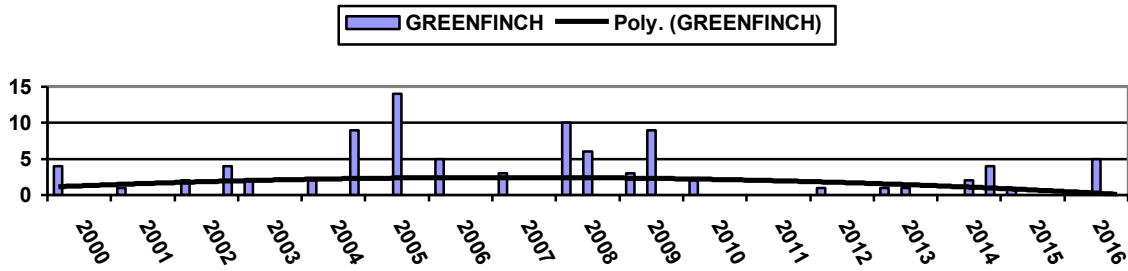
A similar chart to the above, showing the effect of more diverse feeding areas being provided from 2005 onwards. I do not believe that this is indicating a smaller population in the survey area.



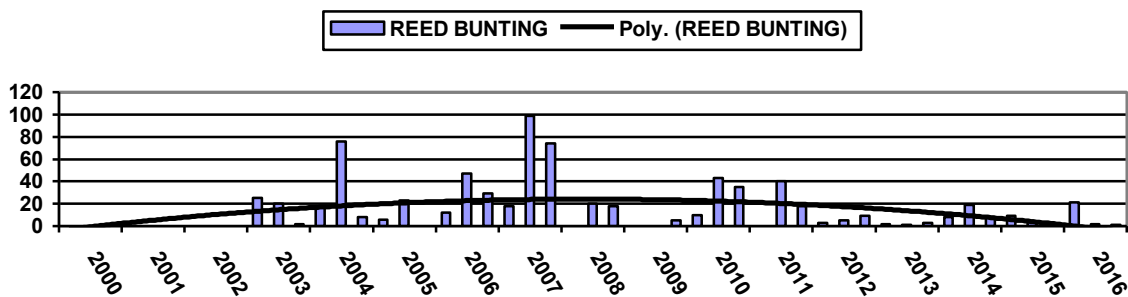
In winter Linnets tend to move and feed in larger flocks and are therefore seen either in large numbers or not at all. The Linnet graph follows the same pattern as other finches. Most Linnets wintering with us are from northern UK or Europe and numbers can vary from year to year with fluctuating conditions.



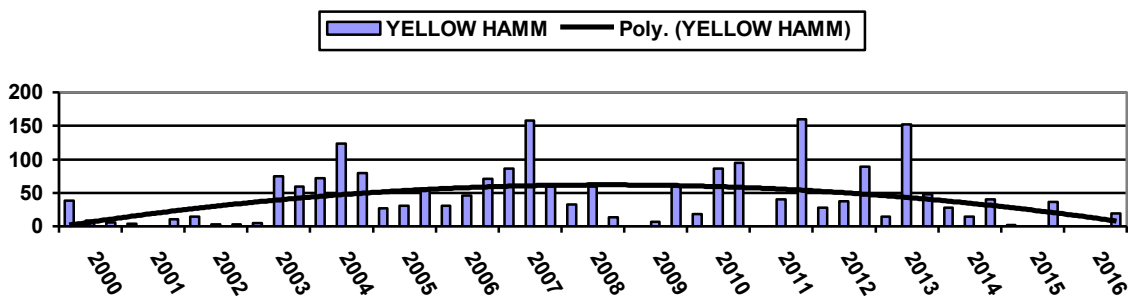
The Goldfinch graph again follows the same trend as other finches in winter.



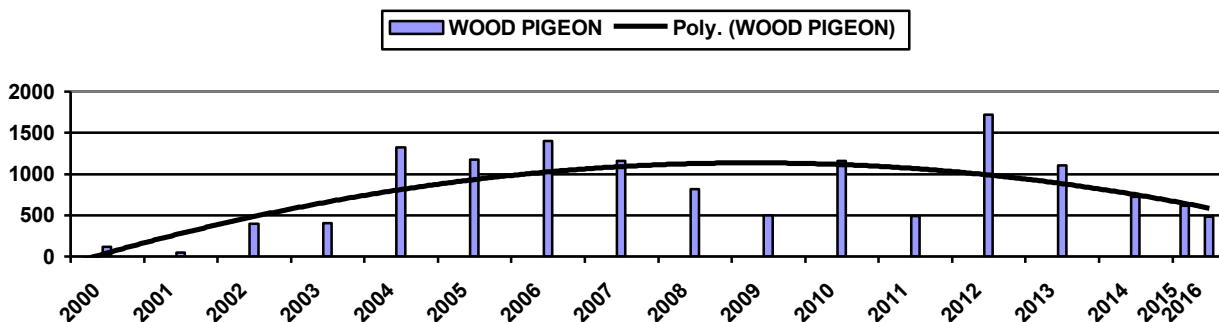
Greenfinches have not been recorded in large numbers. They tend to remain in families or in small groups during the winter. Despite the small numbers seen the trend line still follows the same pattern as other finches.



Occasionally seen in larger groups in winter but more often in smaller numbers mixed with flocks with other finches. Again showing a similar trend line.

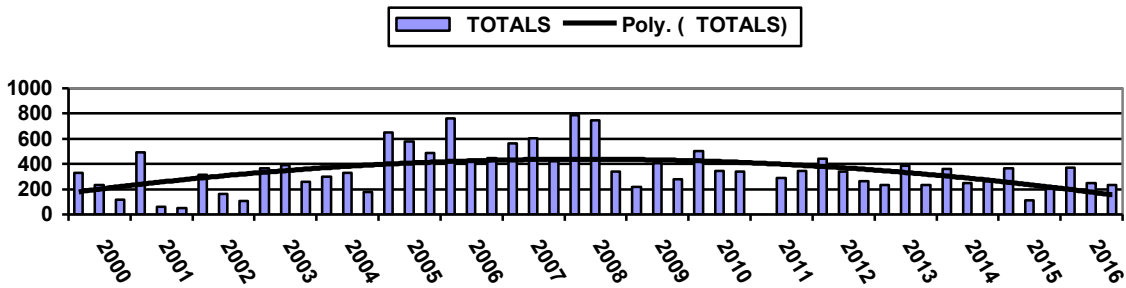


One of our endangered species which has been recorded at Ratcheugh in healthy numbers, occasionally in larger groups but very poor counts in 2015 -16.



Woodpigeon compete with Game Birds for the feed which the Estate provides, it is therefore not surprising that numbers are high. They are also attracted by Oil Seed Rape crops which are liable to suffer more severely as a result. An amazing increase from the first two years of the survey. We can

presume that winter numbers will include migrants from Northern Europe which may not be high in mild winters when food is still available for them in their breeding areas.



Conclusions Based on Winter Counts.

The main reason for the apparent fall in numbers in the winter period, can be traced to the reduced number of the Finch family being recorded. As explained, the extended areas of game crops planted has given these species a much wider winter habitat, much of which has been outside the original routes taken by the survey.

Another factor which is making itself felt is the increased efficiency of modern combines in the reduction of lost grain at harvest. This, together with the effect of herbicides, leaves stubble fields with very little for birds to glean. It is, of course, noted that the edges of cereal fields have not had any weed control at Ratcheugh or Snableazes.

JC.(6/10/16)

