

RATCHEUGH WILD BIRD SURVEY.

REPORT FOR YEAR 18.

NOV. 2016 – NOV. 2017.

Aims of the survey.

This survey is aimed at assessing the effects on the wild bird population made by Northumberland Estates' gamekeeping and farming management in an area of arable land which is also in an Agricultural Environmental scheme. Ratcheugh and Snableazes farms are part of an attempt to encourage the Grey Partridge population to a point where some sustainable shooting can be carried out.

Methodology.

In order to make comparative counts as accurate as possible, recording is carried out by walking the same route at each visit. Six visits are made each year. In the winter period these are in Nov. Jan. and Feb. and monthly during the breeding period from late April to early July.

Visits are made on days which are not too windy or wet, when observation is much more difficult and comparative counts are impossible. Recording is carried out by visual observation or song and call recognition. Although all species are recorded, the "target" species for the survey are those which normally feed and breed on arable land and the adjoining hedges and hedgerow trees. Also included are those predators which may have some effect on those populations, eg. Sparrowhawk and Buzzard.

General Observations.

Eighteen years of this survey have now been completed and it is inevitable that some changes have been made to the area under survey. It is recognized that the population of some 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. Northumberland Estate 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.

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

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 a similar area. 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 period for the survey must be the counts made during the breeding period.

Graphs.

Graphs can easily mislead. Six visits each year produce only a small amount of data on which to base a survey, taking into account all the vagaries of weather and the many other changing conditions 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 were there is some concern.

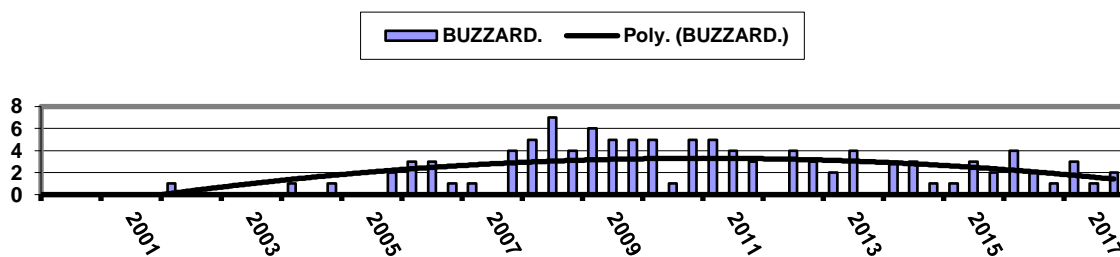
Red listed for those which are at greatest risk.

The UK National average changes in population are shown as – (latest update – 2015) These figures are based on the BTO Breeding Bird Survey.

A (The percentage change between 1995 – 2014)

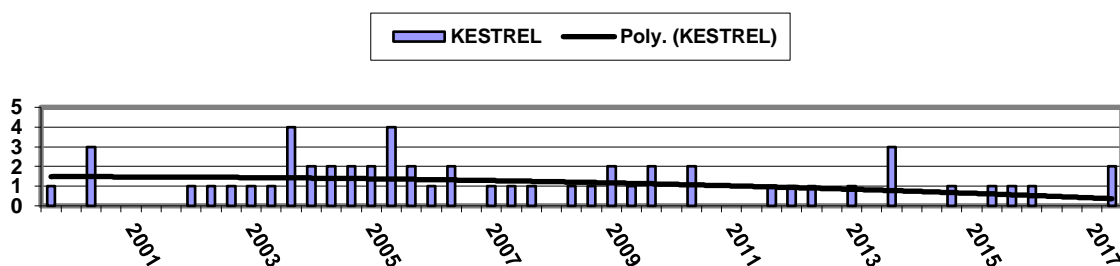
B (The estimated percentage change between 2014 – 2015)

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**) **Unfortunately, although providing much useful information, bird atlases are updated only every ten years and the population of many species can change in the short term.**



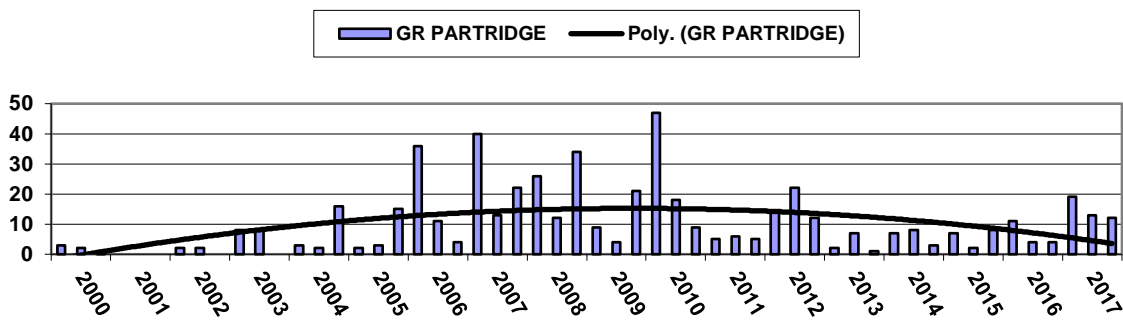
The Buzzard graph follows very closely the National trends during the period that numbers have increased dramatically with movement from the west. Counts now seem to have stabilized, possibly at the optimum number of breeding territories in Northumberland. (NBA).

Black listed. (A) +182% (B) +14%



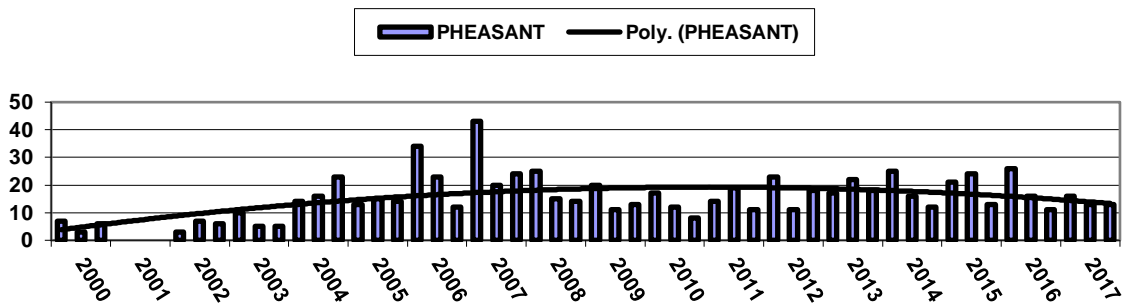
Kestrel counts continue to be erratic and declining slowly. This is in line with National figures. Intensive agriculture and the widespread use of rodenticides are mainly held to be responsible. In woodland areas the increase in Goshawks is blamed in part for the decline. In east Northumberland an increase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

Amber listed (A) -23% (B) +43%



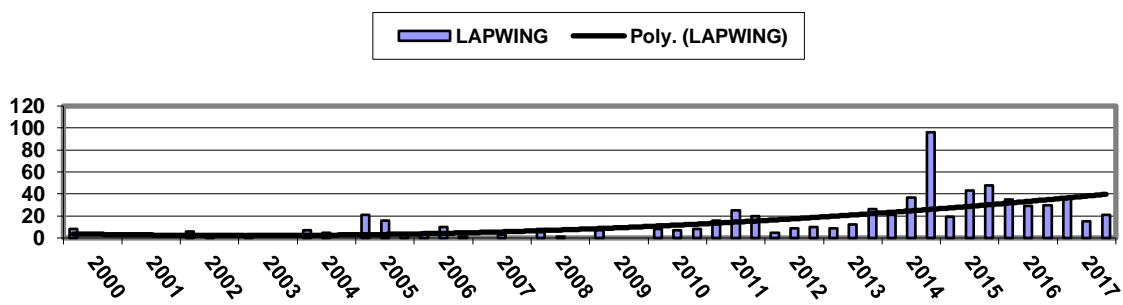
Counts of Grey Partridge in 2017 have been higher than in the previous few years. The breeding season has been good except for two days of heavy rain at the time when some were newly hatched and some losses occurred. Higher counts in the North East coastal area, reported by NBA, can be attributed to the results of this scheme.

Red listed. (A) -55% (B) +24%



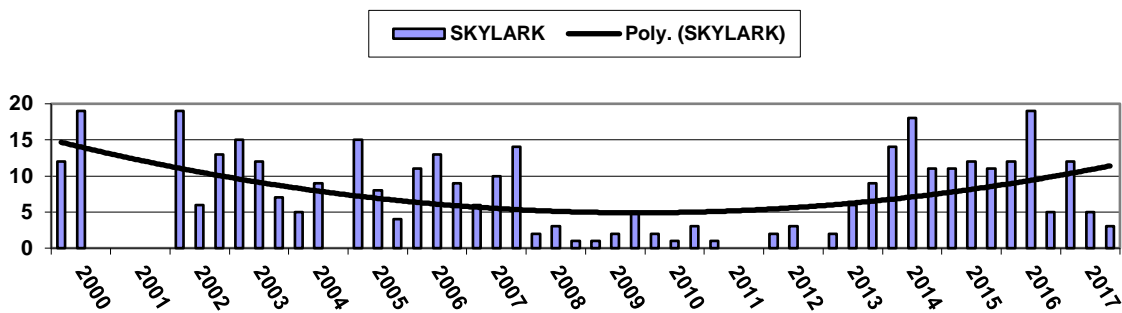
Little change from previous years. Although there are no releases of hand reared Pheasants at Ratcheugh, numbers have again been maintained well, despite some shooting. Counts can be very misleading due to massive releases of hand reared Pheasants for shooting in the area.

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



Changes in the annual rotation of crops in 2017 have resulted in a smaller area of stubble on the survey route and a reduced number of Lapwing recorded. The numbers are still very strong in comparison to other arable farms in the area.

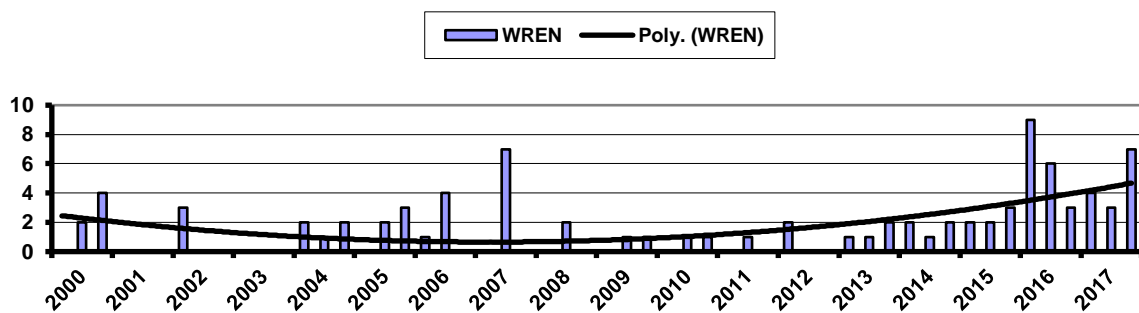
Red listed. (A) -26% (B) +2%



Similarly, changes in the rotation have reduced the area of suitable breeding ground for Skylarks but numbers continue to be higher than in other arable farm in this area. (BA) shows that most Skylark losses have occurred in Ireland.

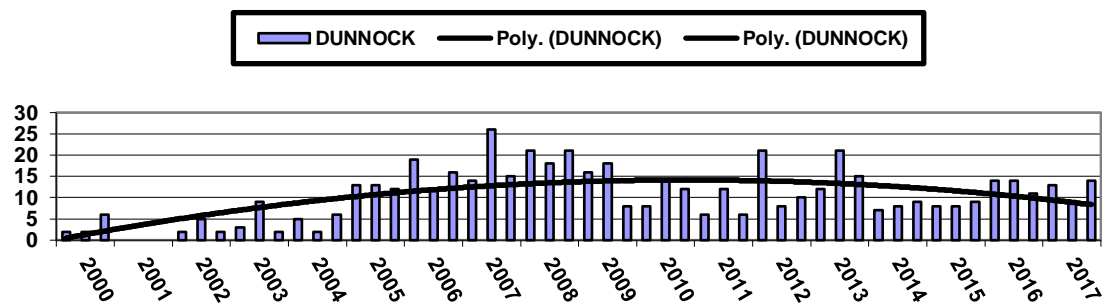
(NBA) shows more gains on the Northumbrian coast than losses but these are outstripped by the percentage gains made recently at Ratcheugh.

Red listed. (A) -23% (B) -6%



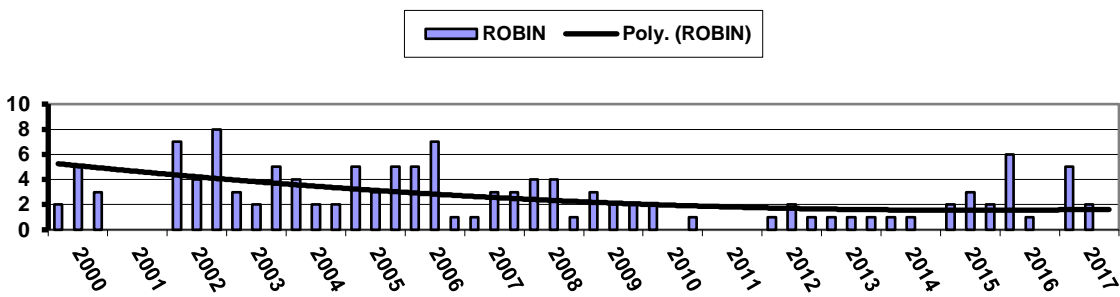
Wren numbers have slowly risen to their highest average numbers in the last eight years. Numbers can fluctuate so quickly that the atlases do not keep pace with the changes.

Black listed. (A) +15% (B) +5%



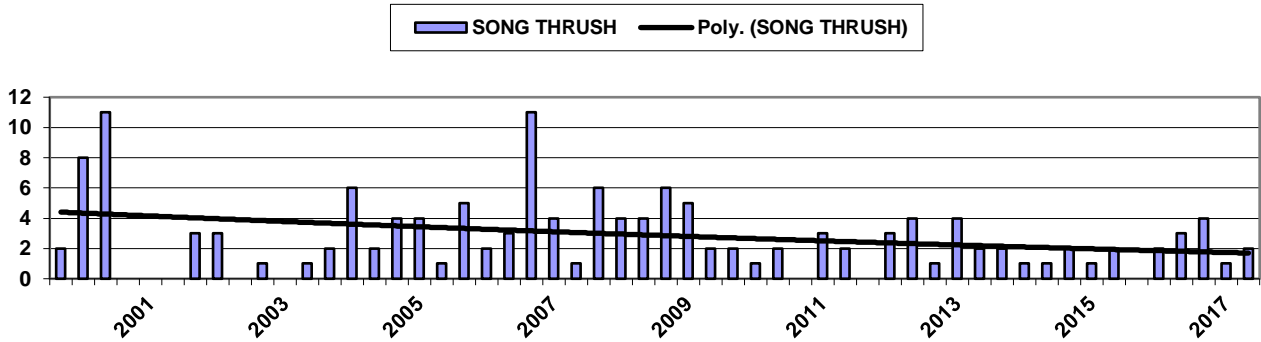
The increase in population nationally is due to the spread of this species into new areas in the west (BA). Population numbers here tend to have levelled off or increased slightly (NBA), a trend which appears to be continuing.

Amber listed. (A) +15% (B) +4%



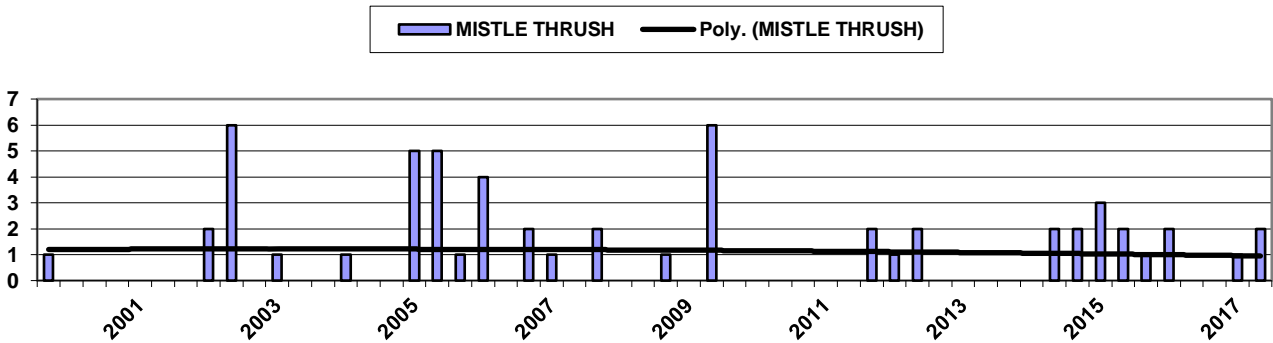
Numbers are higher than recorded in the years following the severe 2010–11 winters when Robins suffered more severely than was recognised. This is the highest number recorded in the last eight years and may indicate a gradual return to a healthier population.

Black listed. (A) +21% (B) +9%



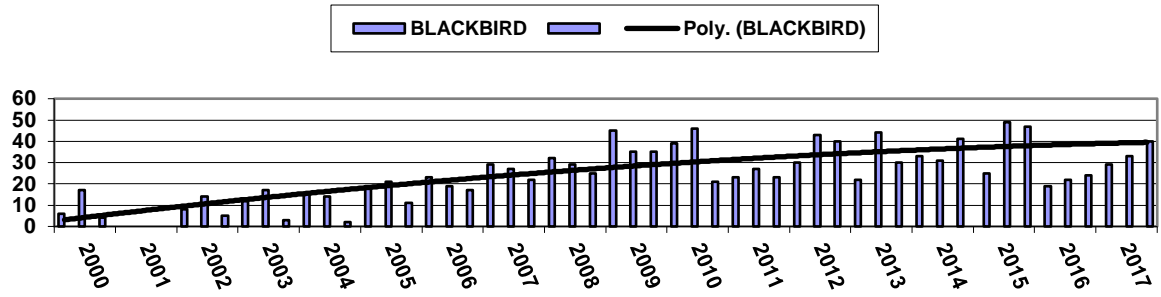
Following the national decline in population counts numbers now appear to be stabilizing or even on the increase. Numbers of Song Thrushes in arable parts has always been lower than in urban or more wooded areas. (NBA)

Red listed. (A) +13% (B) +6%



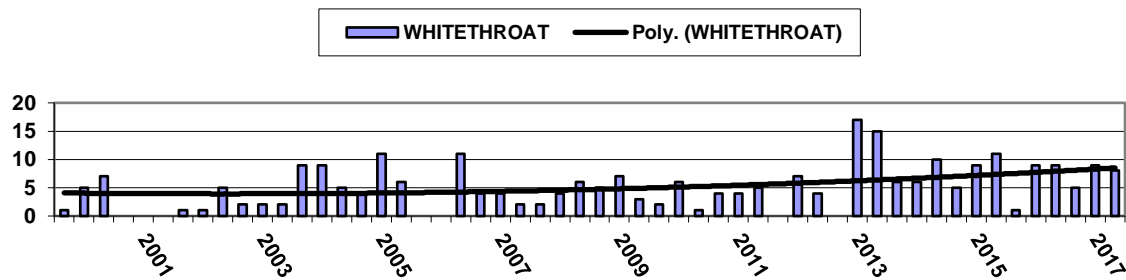
Little change. Only one pair of Mistle Thrushes have been recorded here with occasional family groups and would easily be overlooked on some visits. Again, small numbers can result in misleading graphs. Nationally there has been a gradual decline in numbers over a period of years but the last two years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

Red listed. (A) -40% (B) +3%



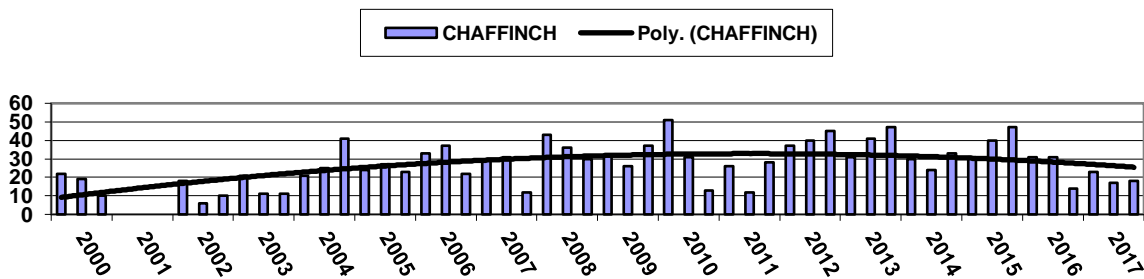
National figures show that there has been a steadily growing population for a number of years (BA & NBA). In the survey area there has been an increase of much larger proportions during the last fifteen years. They have probably benefited from the provision of food and predator control provided by the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

Black listed. (A) +18% (B) -1%



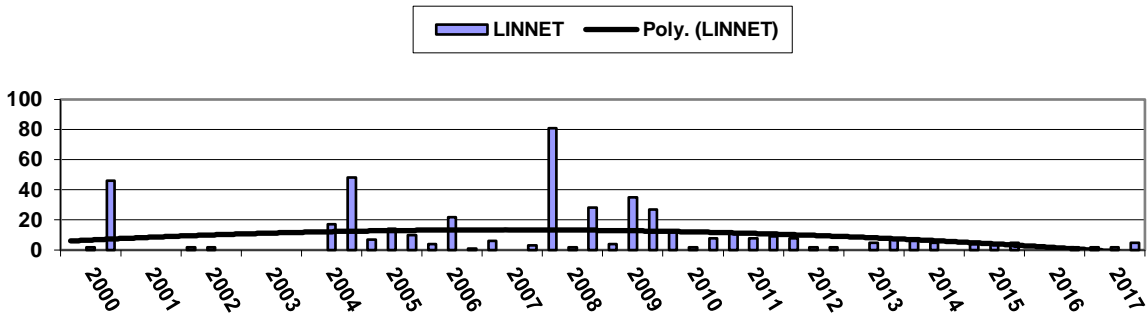
Whitethroats have again arrived in good numbers, continuing a revival. Our counts continue to follow the national trend. Being migrants, they are subject to other extremes of weather or food shortage when in their African winter sites south of the Sahara, which can result in dramatic reductions in numbers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

Black listed. (A) +32% (B) -13%



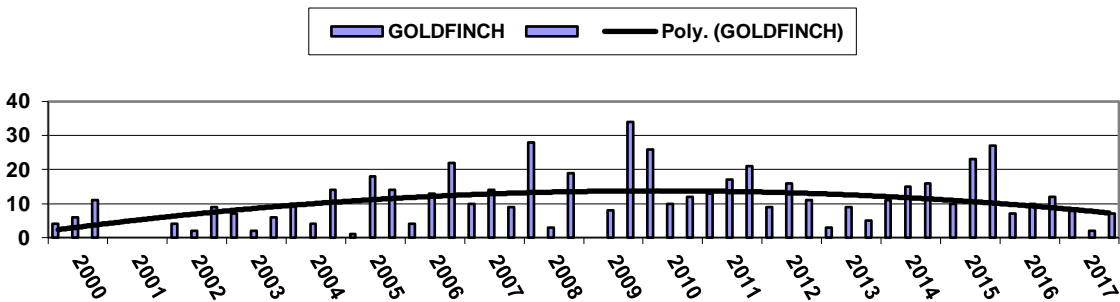
Even though there have been lower counts in 2017, Chaffinches have at least doubled their numbers since the start of the survey, whereas the national averages indicate only a slow increase in numbers (BA. This follows the county averages (NBA).

Black listed. (A) +1% (B) 0%



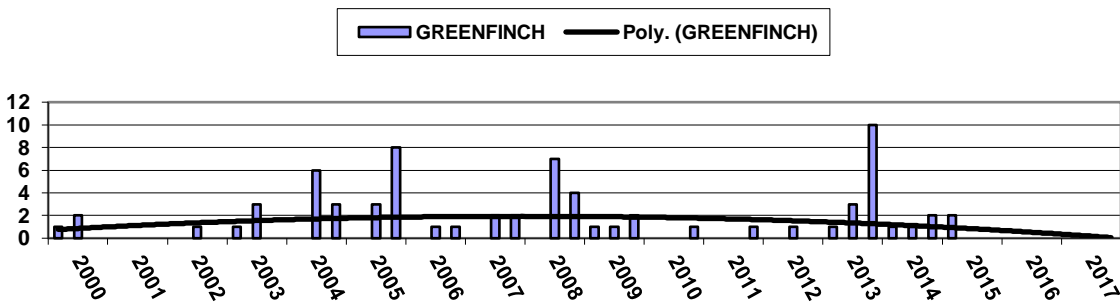
There are very few suitable breeding sites for Linnets in this survey area, since they prefer areas of more dense bush, the most popular being Gorse thickets. Nationally they are in decline which would agree with the survey trend.

Red listed. (A) -24% (B) +31%



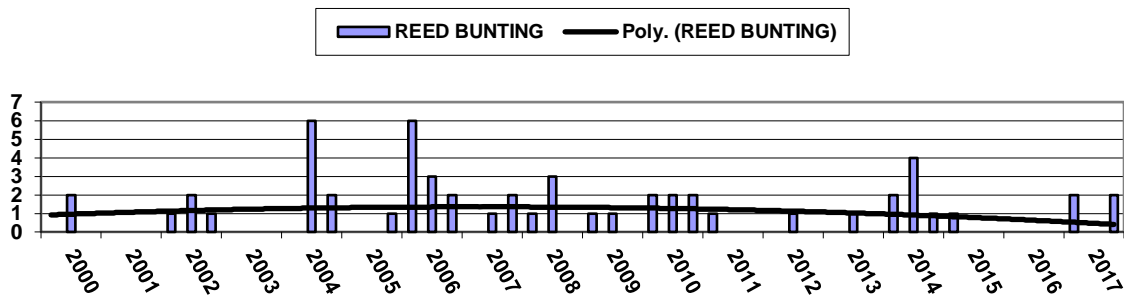
Smaller counts in 2017. As for Linnets, nesting sites are limited. Goldfinches in the survey area are following both the national and local trends, In the NBA area there has been a higher increase in numbers than most other parts of the country, a result which is not mirrored by these survey counts. They continue to extend their breeding range to the north of Scotland.

Black listed. (A) +111% (B) +13%



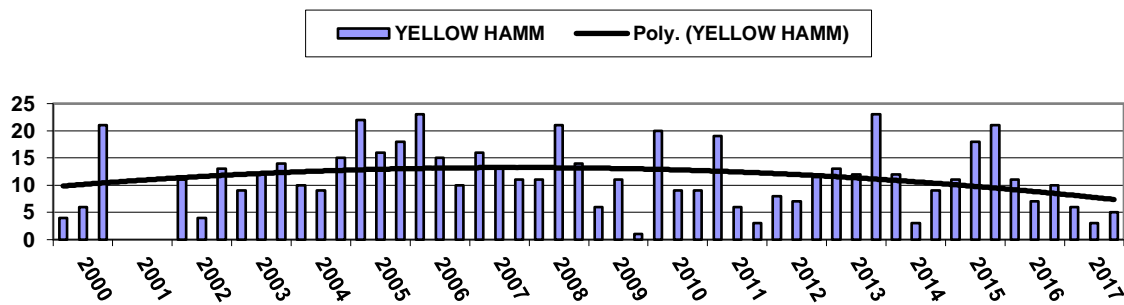
No records of Greenfinch have been made in most of 2015 to 2017, which follows the national trend. Losses of birds are partly due to the disease trichomonosis. This is another species which is increasingly found in urban gardens. (NBA)

Black listed. (A) -36% (B) -10%



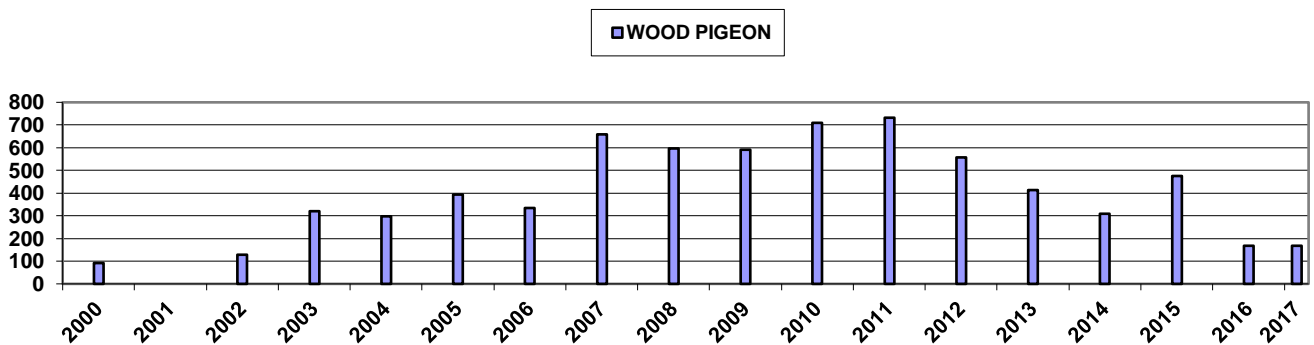
There is very limited scope for Reed Buntings to breed here with practically no suitable habitat for them, although more Reed Buntings are recorded adopting oil seed rape crops as an alternate breeding site. (NBA) a move which has been reported from this survey area

Amber listed. (A) +34% (B) +9%



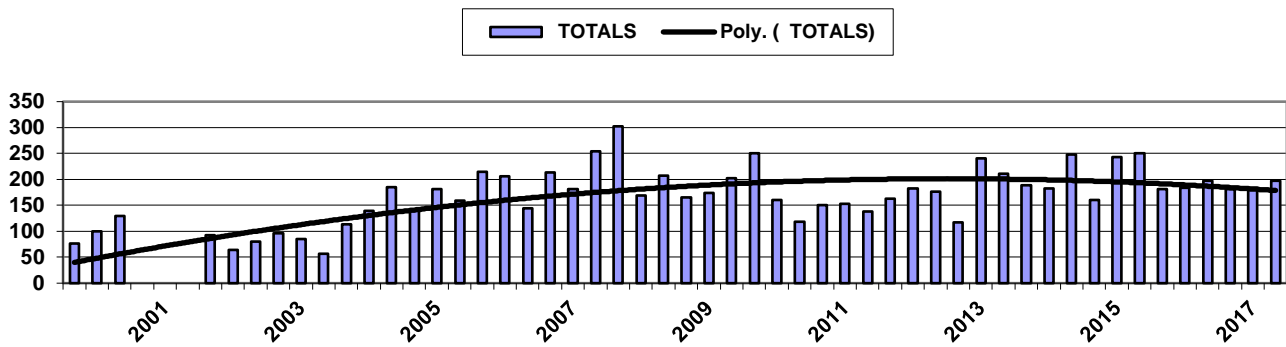
Yellowhammers seem to be holding their own on the east coast with most losses occurring on the west of the country. Despite the drop in the 2017 survey counts, their numbers are higher than the average for the north east

Red listed. (A) -25% (B) +3%



Comparatively small counts in 2016 and 2017 are difficult to understand when the availability of food here is so high in both summer and winter.

Black listed. (A) +39% (B) +8%



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

Conclusions from the breeding period counts.

The breeding season started early for many species with a warm dry spell. This was followed by a period of colder than average night time temperatures and very dry conditions when insect life was at a low level. It then continued to be mainly dry except for two days of heavy rain at a time when some young were fledging. It has been a reasonably good season for most species.

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)
- Whitethroat (Amber listed)
- Wren.

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

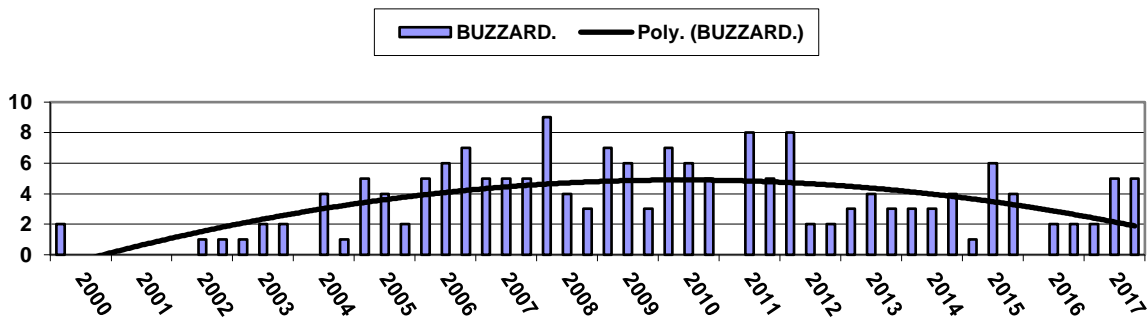
- Buzzard.
- Kestrel. (Amber listed)
- Pheasant.
- Song Thrush.(Red listed)
- Mistle Thrush.(Amber listed)
- Robin.
- Linnet. (Red listed)
- Goldfinch.
- Greenfinch.
- Dunnock.(Amber listed)

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

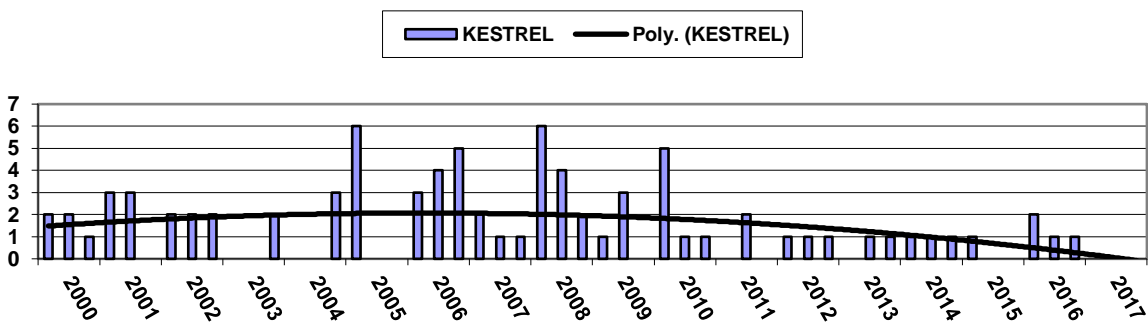
- Woodpigeon
- Reed Bunting. (Amber listed)

Target species graphs for the winter periods.

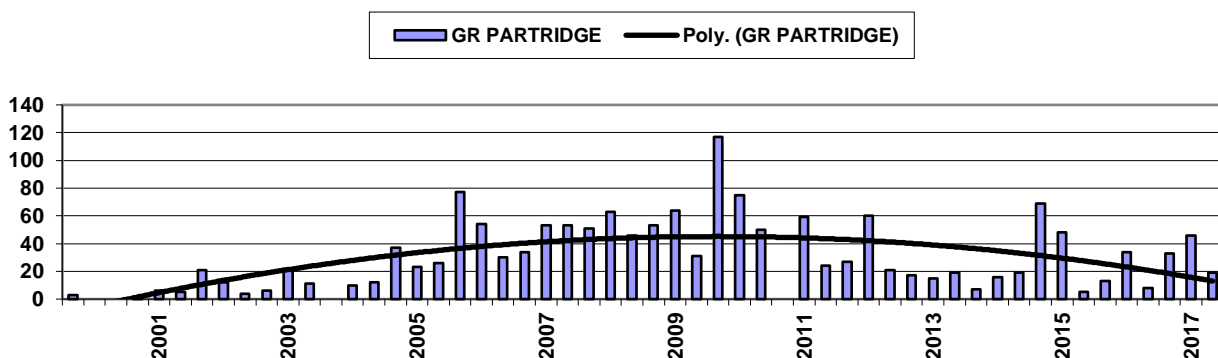
No figures are available from National sources to use as a comparison with the winter counts. It was not possible to make any counts in Jan. 2011 because of severe weather with a long period of complete snow cover, when disturbance to birds was considered to be detrimental.



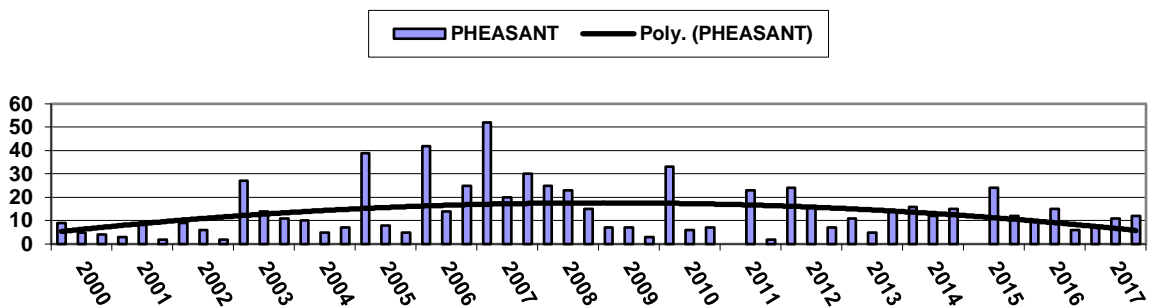
Average numbers for Buzzard remain fairly constant, supporting the conclusion that the population has now settled at a sustainable level, after the huge build up in numbers from the west. Buzzards are a sedentary species with very little movement during the winter months.



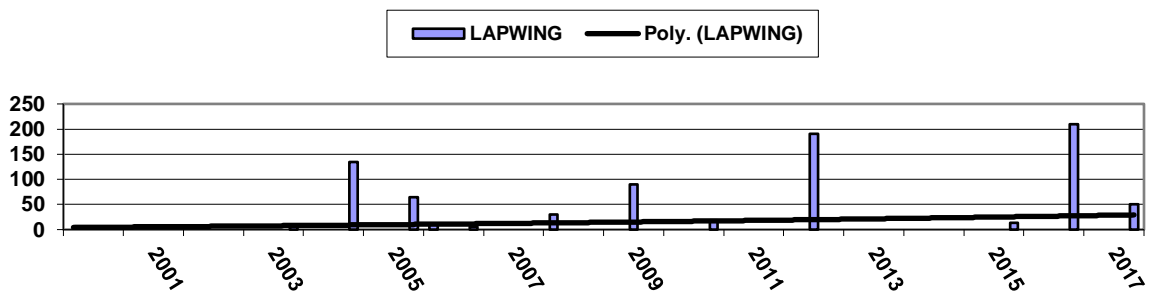
The graph illustrates the continued fall in Kestrel numbers, no longer our commonest bird of prey. See the summer graph for more details.



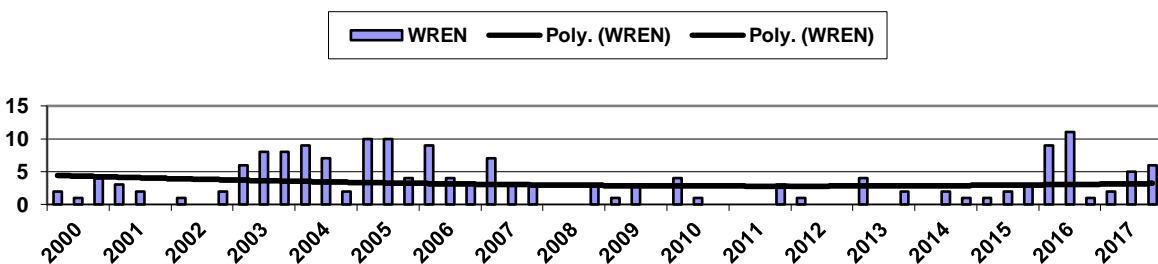
There has been a gradual reduction in counts of Grey Partridge since 2011. Severe winter weather in that year followed by a series of poor breeding seasons and some shooting appear to have reduced numbers at Ratcheugh but the population is still being maintained at a higher level than the national average.



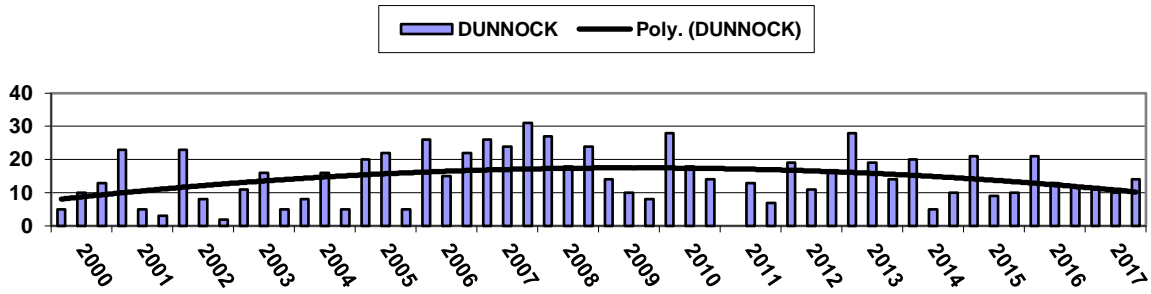
Pheasant records have followed the same pattern as Grey Partridge. No hand reared birds have been released here for a number of years but there are bound to be stray birds from neighbouring shoots which are now breeding at Ratcheugh. There has been some shooting.



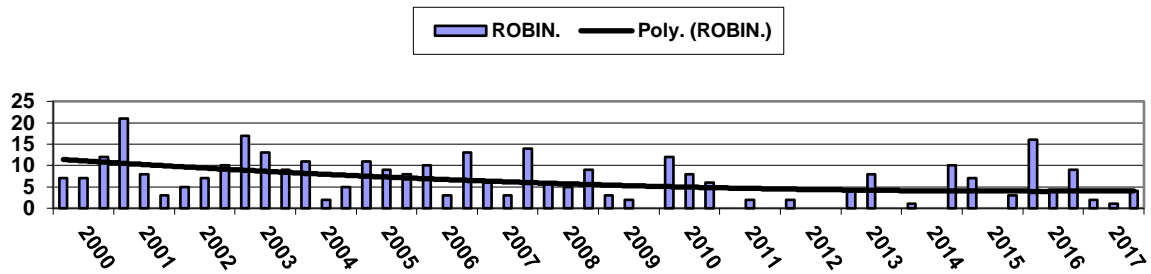
In winter Lapwings flock together and spend most of their time feeding at the coast or further south, to be replaced by migrants from further north. In severe weather they will move to more sheltered areas a little way from the coast as is illustrated by the occasional large groups at Ratcheugh.



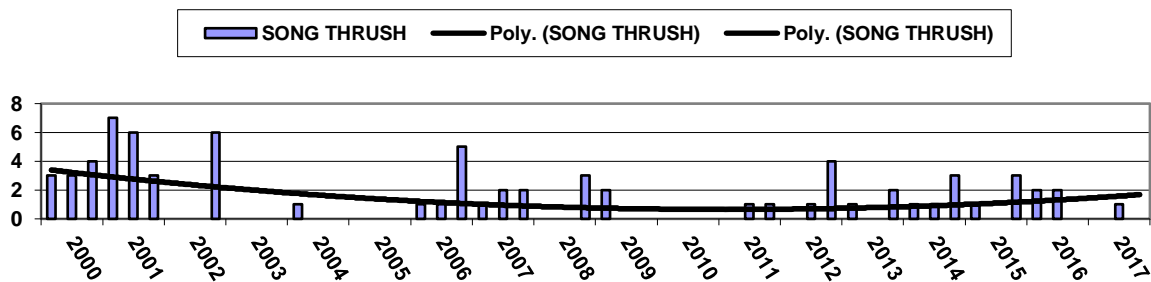
There has been an increase in Wren numbers this year. Although it is mainly a woodland species records from Ratcheugh in 2003/6 show that a higher population can be maintained here if conditions allow. The winter of 2016 – 17 was warmer than average with no period of snow cover and must have helped survival rates for Wrens which in an average winter lose a high proportion of their population.



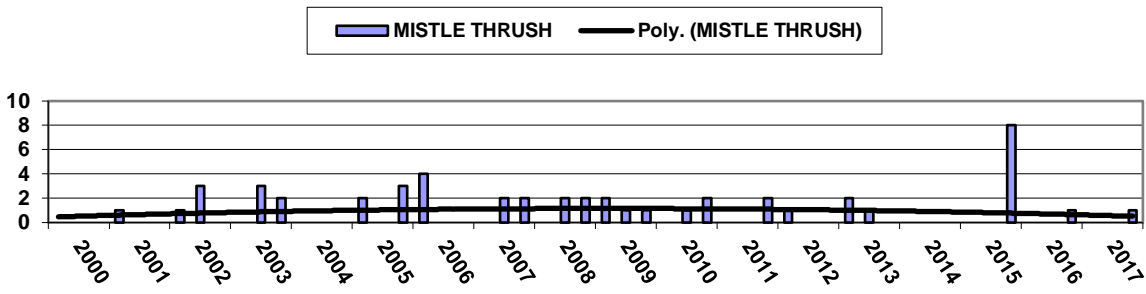
As in the summer period the number of Dunnocks recorded here is gradually falling. There is normally little movement of this species during the winter. It may be becoming more of an urban garden bird.



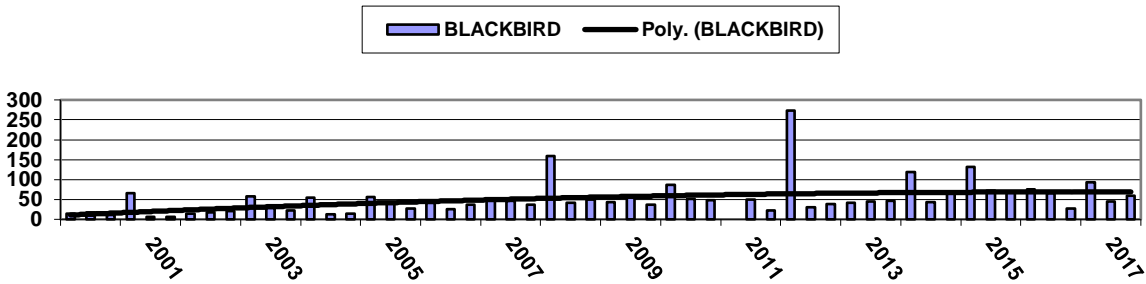
Counts of robins tend to be very erratic, apart from singing birds they can be difficult to spot and are more likely to be found in higher numbers in woodland or urban gardens. Winter populations are bolstered by migrants from northern UK or Europe.



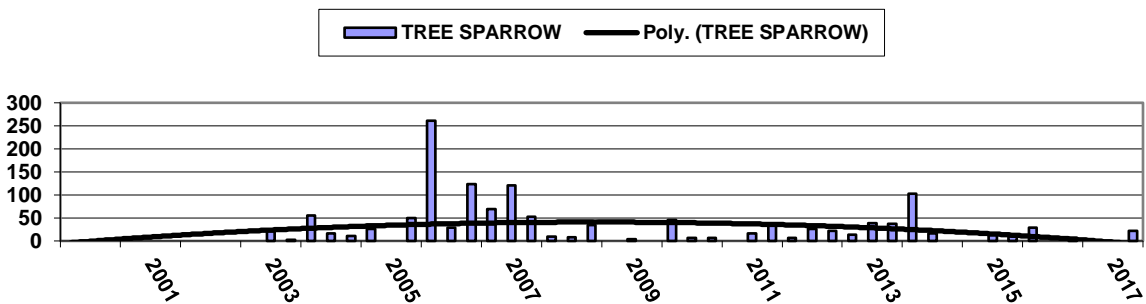
Winter numbers may have been increased by an influx of migrants from northern Europe, but this was not obvious in the 2016 – 17 winter.



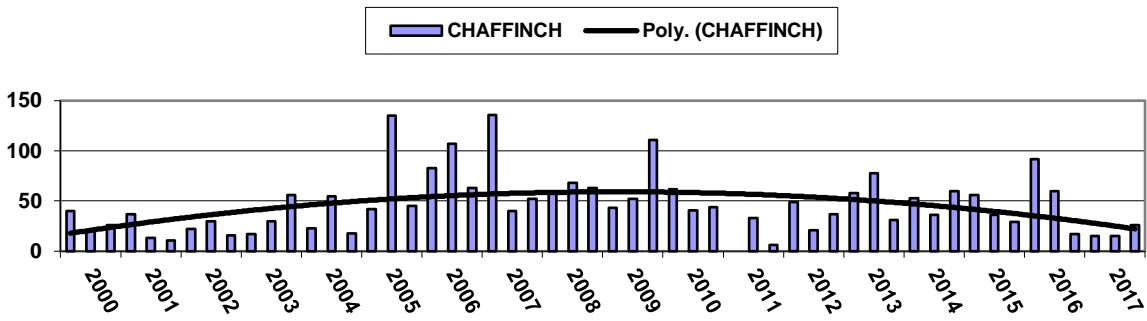
The one pair of Mistle Thrush recorded here is not enough to produce figures which could indicate any population trend. The record of eight birds in Feb. of 2015 was one family group.



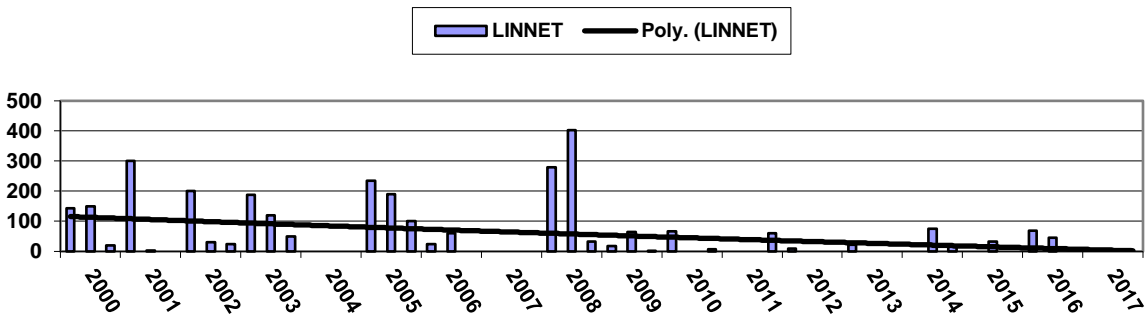
A continuing increase in blackbird numbers arriving here in the winter. The first count of most years clearly shows a much higher number of birds arriving from Europe and being recorded here, before they become more widely scattered throughout the rest of the country. If the one very high count in 2012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



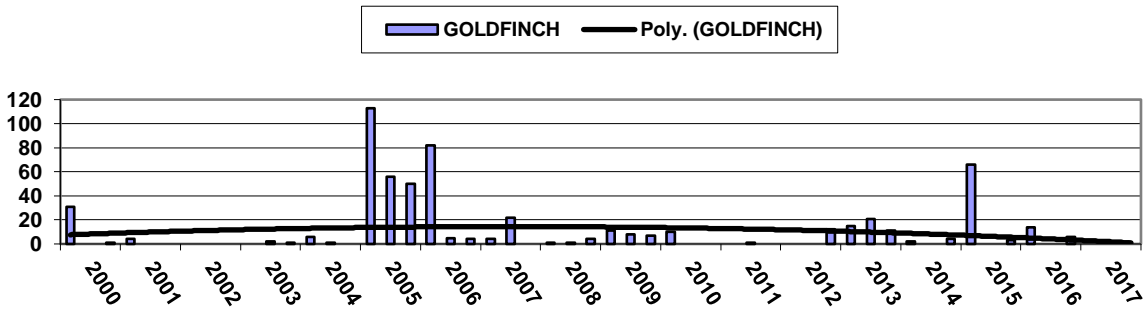
As for other finches in the winter the graph illustrates how they were more concentrated into the fewer areas of available feed in the 2005/7 period, after which more feed areas were provided and finch flocks became more fragmented and more widely spread. The number of Tree Sparrows wintering in this country may have declined in the last two years when weather conditions in most of Europe have been unusually mild and did not encourage birds to migrate.



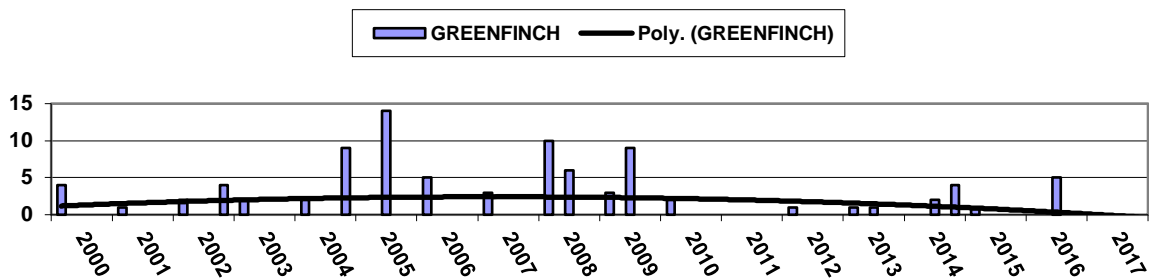
A similar chart to the above, showing the effect of more diverse feeding areas being provided from 2005 onwards. I do not believe that this is indicating a smaller population.



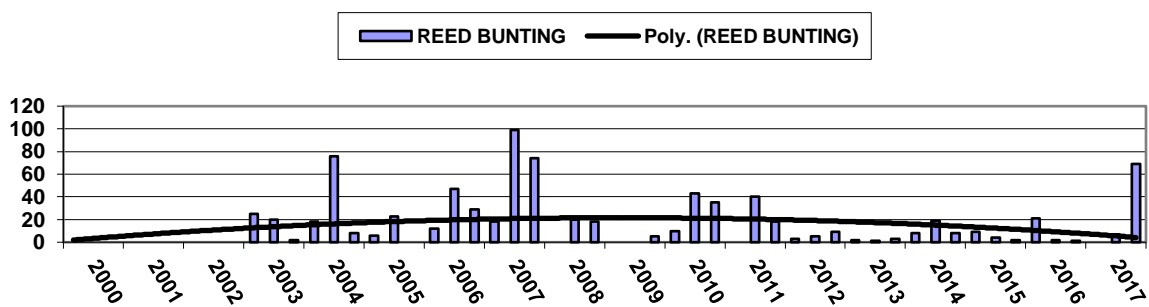
In winter Linnets tend to move and feed in larger flocks and are therefore seen either in large numbers or not at all. The Linnet graph follows the same pattern as other finches. Most Linnets wintering with us are from northern UK or Europe and numbers can vary from year to year with fluctuating conditions.



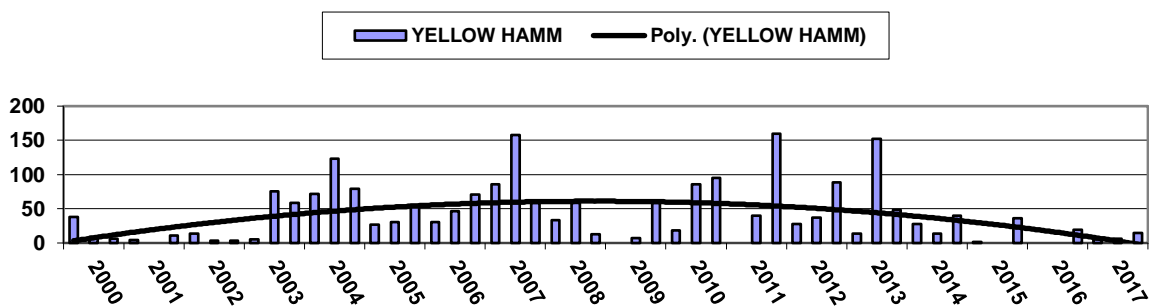
The Goldfinch graph again follows the same trend as other finches in winter.



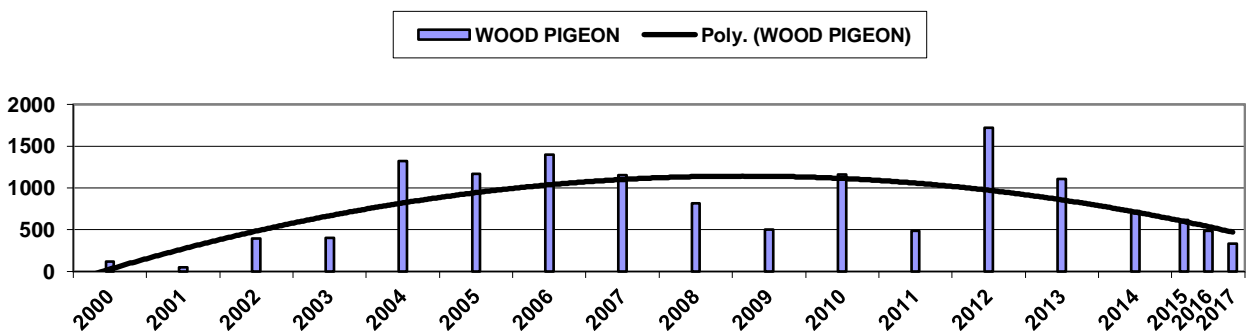
Greenfinches have not been recorded in large numbers. They tend to remain in families or in small groups during the winter. Despite the small numbers seen the trend line still follows the same pattern as other finches. Garden bird counts show good numbers of Greenfinches in more urban areas.



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 to other finches in the survey area.

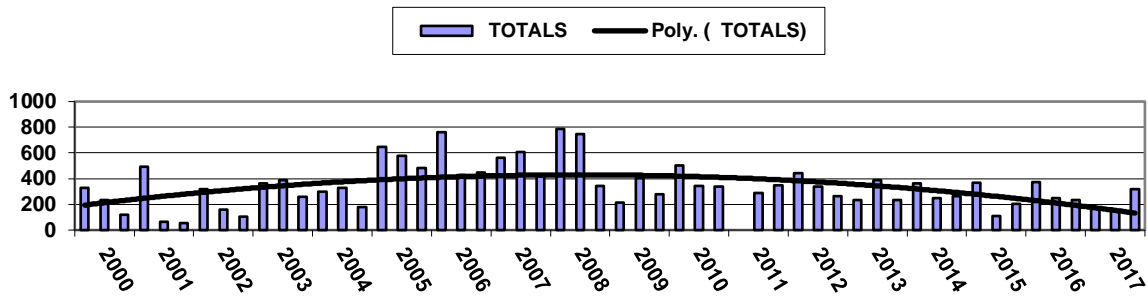


One of our endangered species which has been recorded at Ratcheugh in healthy numbers, and sometimes in quite large flocks. In 2016 and 2017 counts have been very low.



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 wide spread 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 combine harvesters 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.(6/6/17)

