

**ALNWICK WILDLIFE GROUP**

**NORTHUMBERLAND ESTATES BIRD SURVEY**

**REPORT FOR APRIL 2018 – FEBRUARY 2019**

**This survey is carried out by members of the Alnwick Wildlife Group.**

**Introduction**

Aims of the Survey

The basic aim is to attempt to measure the effects of Northumberland Estates' management on the wild bird population in the area of the survey, also to record any other points of interest which the survey may reveal about the local wildlife.

Areas of the Survey

The survey is taking place on four areas, where Northumberland Estates are attempting to increase the population of Red Grouse to a point where some sustainable shooting is possible. One other area is leased for private shooting and is under different management. These areas are: -

Post Office Pylon.  
Black Lough.  
Alnwick Moor.  
Hulne Moor.  
Kimmer Lough. (Private shooting)

All these areas are on the Fell Sandstone ridge, which runs roughly in a semi-circle round the base of the Cheviots. All except the Kimmer Lough rise to about 250 metres and have a typical upland vegetation of heather on shallow peat but also a wide variety of other habitats. The average size of each area is approximately 120 hectares. The Estates management is mainly heather burning to improve its feeding value for Red Grouse and suitability for breeding cover. More intensive control of some predators is carried out, improved water availability for dry periods and provision of limestone grit etc. Hulne and Alnwick Moors form the area of present highest Grouse population, followed by the Post Office Pylon, which is approx. one mile away, and the Black Lough at two miles. Here there are only one or two pairs of breeding Red Grouse but it is hoped that the numbers will increase. Kimmer Lough is more distant and at a lower level. The shooting here is let and the management of the moor is less intensive. Few Red Grouse have been recorded.

## Methodology of the Survey.

The five sites are visited five times annually, three during the breeding season and twice in the winter. All birds are recorded but a small number have been selected as the “target species” which are those more commonly found in these areas and most likely to be affected by the Estate management. In an attempt to produce comparable results specific routes are used at each visit and approximately the same time spent there. Visits are made when weather is reasonable since recording is impossible in extreme weather.

## Analysis of Data

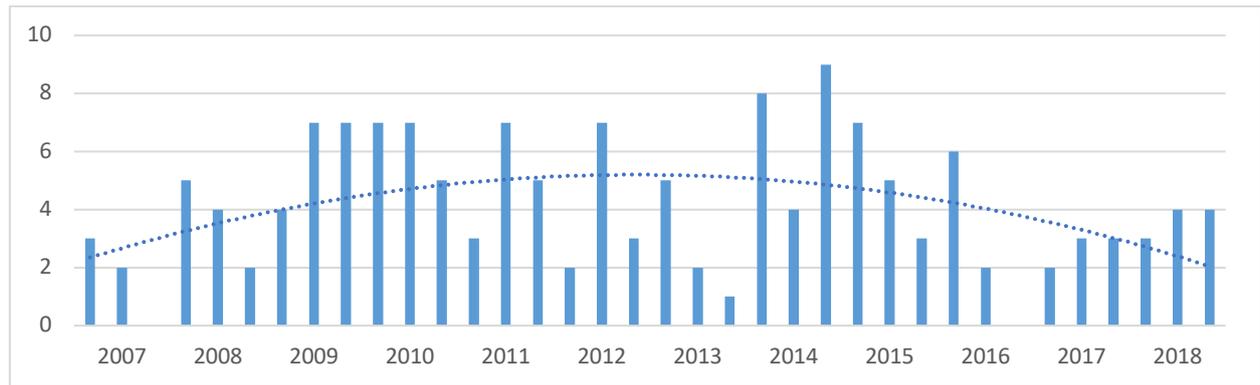
The counts of the target species from each area are totalled and graphs produced from these results. To achieve the aims of the survey a comparison with population counts over a larger area must be made. An attempt is made to compare our figures with English national averages produced by BTO from their annual Breeding Bird Surveys. National figures can often be misleading when used as a direct comparison in any one local area and these facts have to be taken into consideration when reviewing the results. The “Bird Atlas” published by the British Trust for Ornithology, also gives very useful information when comparing local trends in population over the last ten-year period since the previous Atlas was produced but are becoming less relevant as time passes. The more recently published “Northumbria Bird Atlas” from the Northumbria and Tyneside Bird Club, also provides much useful and more local information.

The numbers of some species can vary so much during the ten-year periods between National surveys that the results can be very misleading. A more accurate picture can be obtained from annual surveys such as this, being made on a more regular basis.

There are many factors affecting bird populations. Weather is easily shown to be the most important. Periods of severe winter conditions leading to starvation, especially in those species more dependent on insects for food. ( eg. Wrens.) The effects of the winter periods on some species between 2010/11, when there were two month-long periods with complete snow cover, as well as low temperatures, can be clearly seen on the graphs. Late and wet breeding seasons also have had a depressing effect on some species. It is interesting to see how populations have changed with the conditions that have been experienced since then.



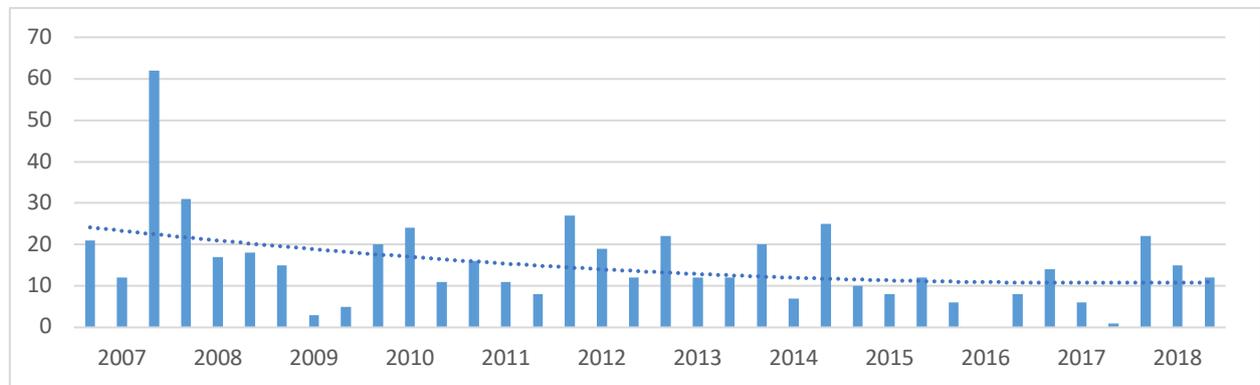
## Buzzard



The vast spread of Common Buzzard into the eastern counties in the last 25 years is reflected in the long-term trend figures shown below. A reduction in local counts during 2011/13 was attributed to poor breeding results and a levelling off due to pressure on available breeding territories. Our records for 2016 show a reduction in numbers which may be due to the very late breeding season in the North East and follows the national figures which show a small drop in numbers. This has been followed by an increase in 2018 which again follows the national figures.

Black listed (A) +93% (B) +6%

## Red Grouse



The population of Red Grouse appears to have reduced gradually over the last few years, to 2017. The low level of shooting during that period will probably have been sufficient to control any increase in numbers. None were shot in the 2016 to 2018 seasons. These counts may be very misleading and numbers during the winter are usually much higher (see the winter chart) when birds are less secretive. One or two pairs have bred successfully in recent years at the Black Lough but it is thought that they may have moved to other areas of higher population once on the wing.

(NBA) shows major gains in the area of the Cheviots. (BA) indicates little change in the national population during the last twenty years but a healthy increase in numbers in the last twelve months. This chart indicates a small increase in the last twelve months.

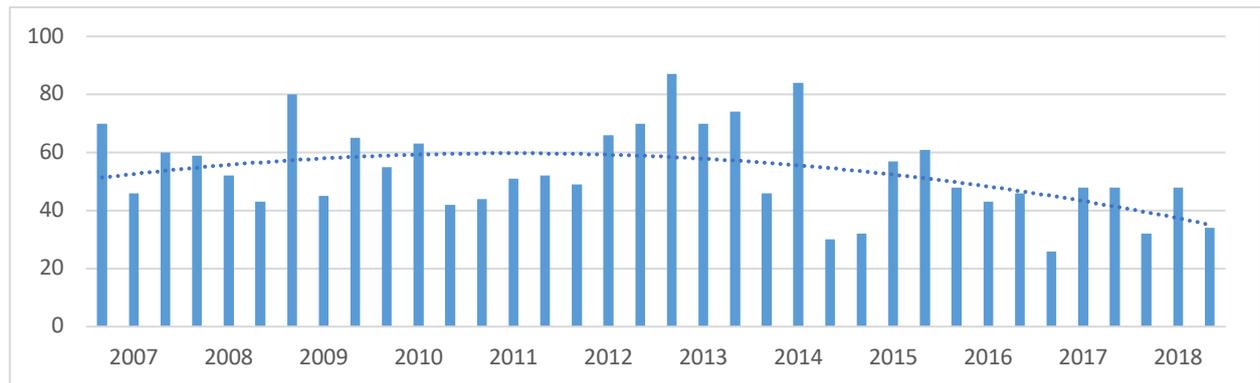
Amber listed (A) +19% (B) +38%







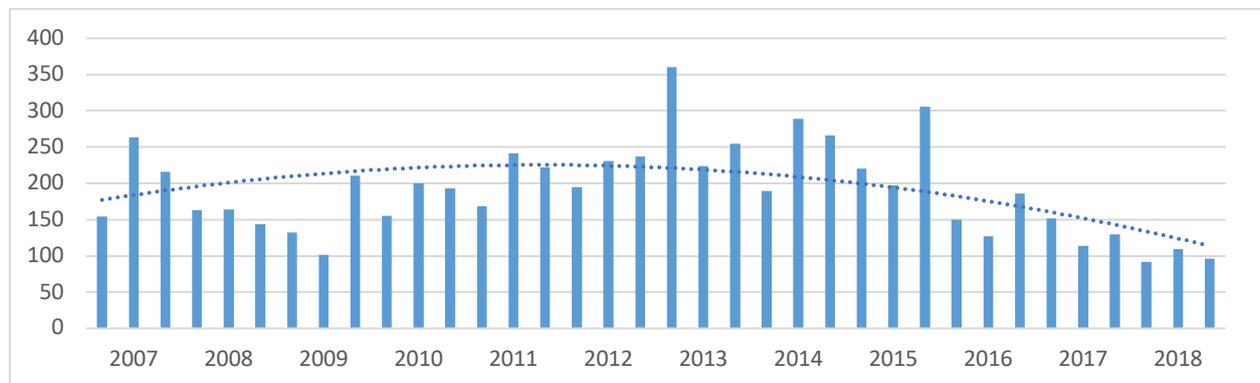
## Skylark



Skylarks in our area appear to have been holding their own, a better result than national averages. As one of the commoner species in the survey area, they are more likely to show the results of local management. The biggest losses have been in Ireland (BA). Losses in England are mainly associated with more intensification in arable farming areas with the change from spring-sown to winter-sown crops. Population in the North East appears to be stable (NBA).

Red listed (A) -20% (B) +1%

## Meadow Pipit

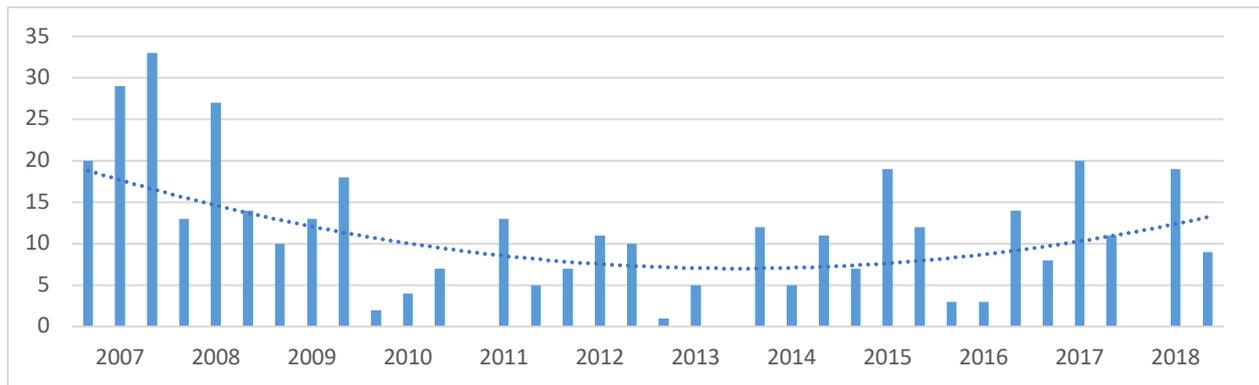


Meadow Pipits are the commonest species in the survey area and are therefore most likely to indicate any movement in population trends. In this area they would appear to have followed the national trend with a fall in the early years of the survey but a better than average rise until 2016 since when counts have been lower. In the British Isles there has been a loss of numbers mainly in Ireland and the west coast of the UK (BA). In the North East numbers are more or less stable (NBA).

Amber listed (A) -7% (B) -2%



## Stonechat



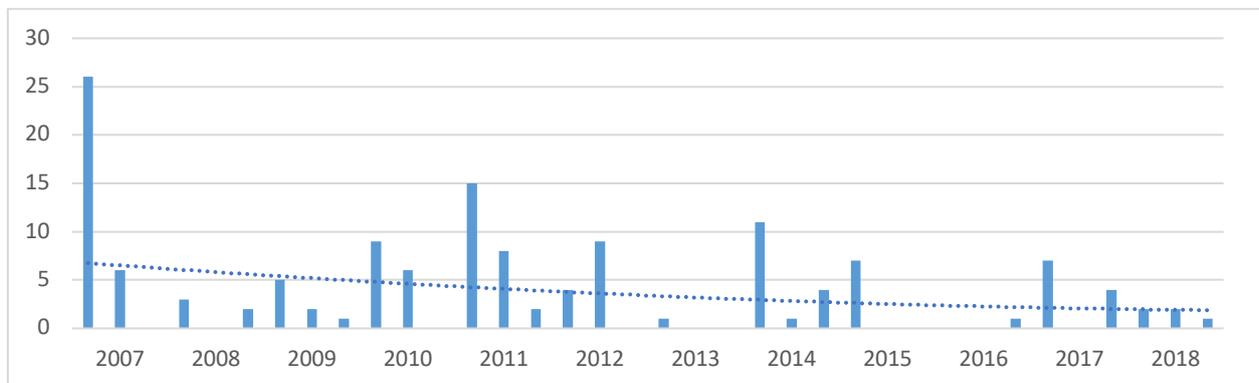
Stonechats in the survey area show signs of recovery in the last four years, after the bad winters of 2010/11 which the graph would indicate, has affected them severely. In the twenty years up to 2008 there had been a steady increase in numbers moving into the North East of England and eastern Scotland from the west. (BA) National figures show a steady increase.

Black listed

(A) +92%

(B) +31%

## Wheatear



There would appear to be only a very small population of Wheatears breeding in the survey area, most records being of birds in passage, early in the season. It is estimated that there are only 700 pairs nesting in the county (NBA). Nationally there has been a very gradual reduction in numbers over a long period (BA). This is another migrant species.

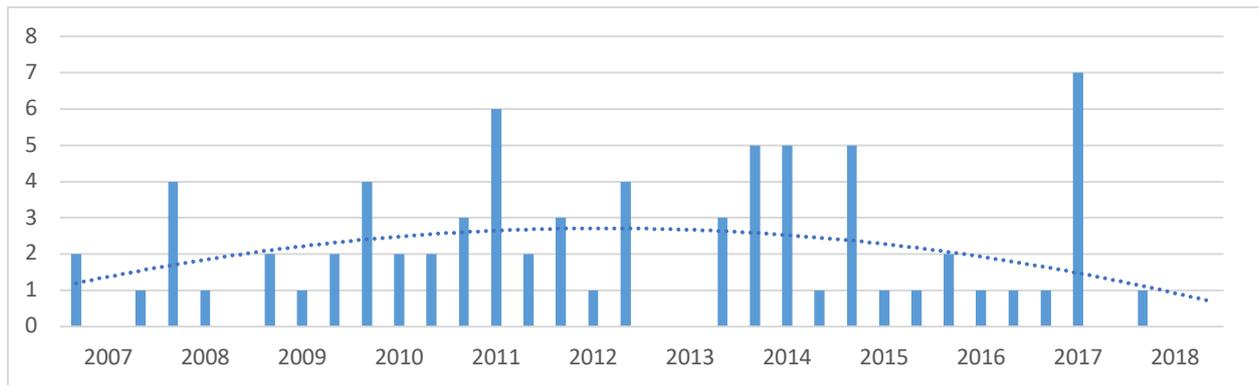
Black listed

(A) -26%

(B) -18%



## Yellowhammer



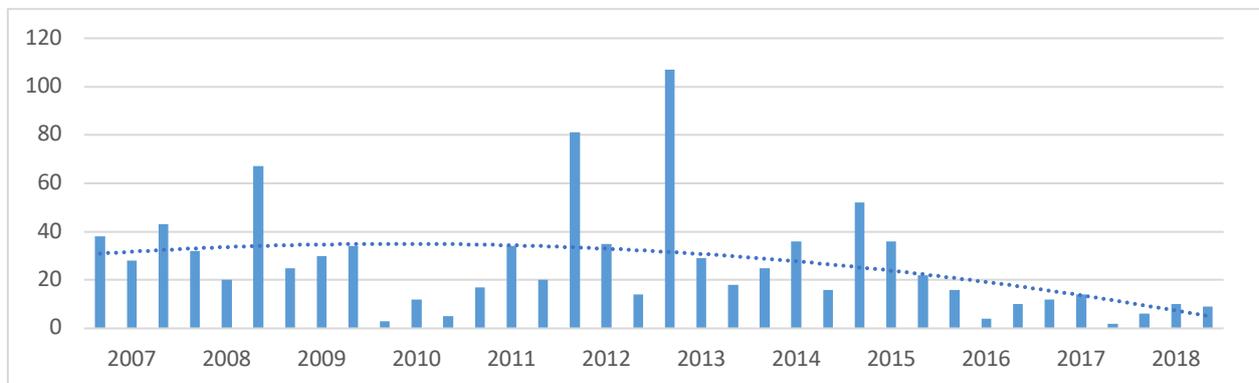
In the survey areas Yellowhammers are only recorded in small numbers during the breeding season as, except for a few areas of Gorse, there is little suitable habitat for them. Over the British Isles, continued losses seem to have happened on the edges of its recognized breeding areas and on high land mainly in the north west and in Ireland. (BA) Locally the population is fairly steady (NBA). Historically their decline started in the 1950/60's, possibly due to the use of organochlorine as a seed dressing.

Red listed

(A) -18%

(B) -5%

## Linnet



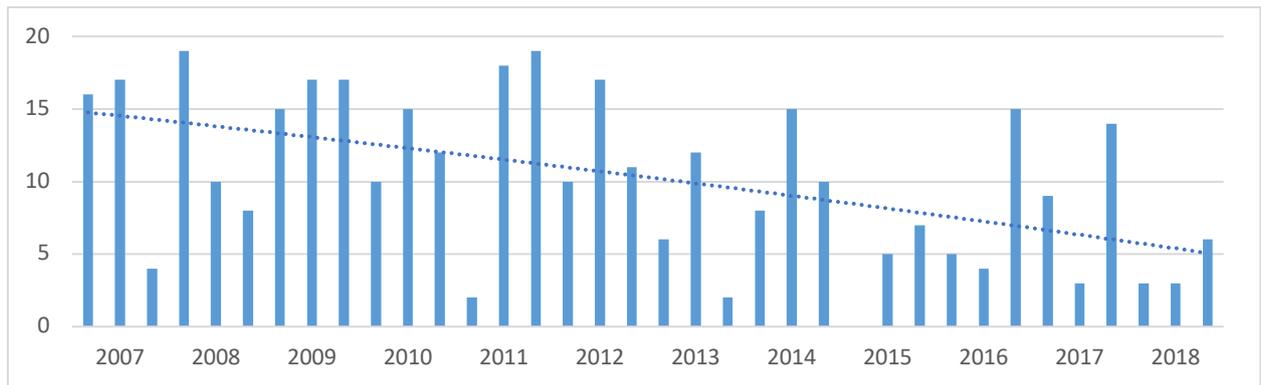
The higher counts made in the early or late breeding period when Linnets are either still in flocks prior to breeding or are already beginning to gather together after fledging, should be discounted. The breeding population obviously suffered in the bad conditions of 2010, then increased in numbers until the last three years when they have again fallen. Nationally, Linnets have suffered losses in their northern breeding areas (BA), but appear to have a stable population here in the North East (NBA). This is not indicated in our survey results.

Red listed

(A) -18%

(B) +1%

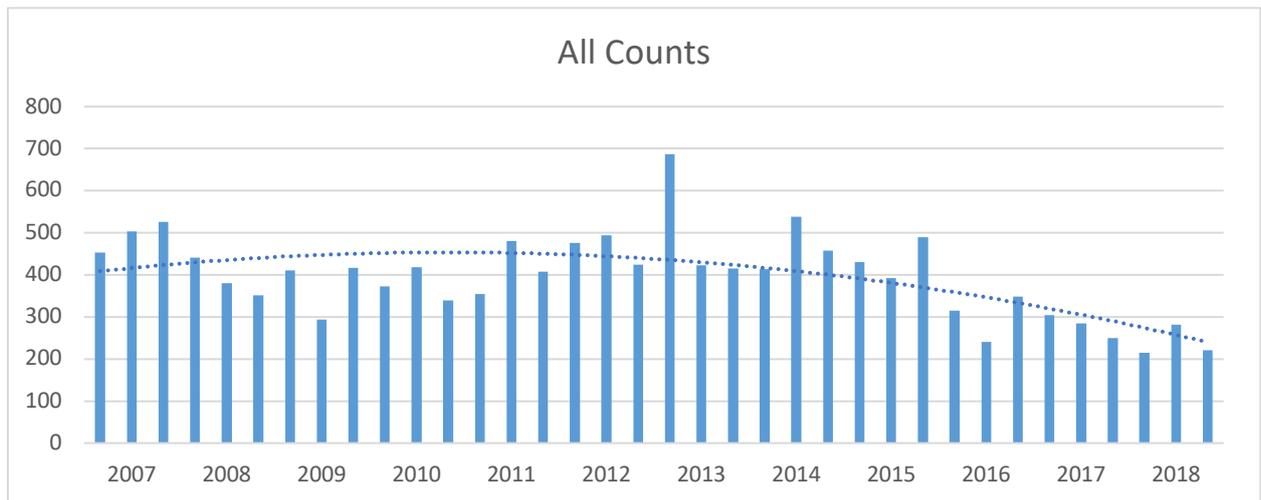
Reed Bunting



2018 was the lowest count of Reed Buntings in the survey so far, with 2016/17 being a little better. Only a relatively small part of the area is suitable breeding habitat. Nationally the population is stable. (BA) Locally there has been an increase at suitable habitats. (NBA)

Amber listed                      (A) +32%                      (B) +16%

Total of All Breeding Period Counts (Target Species)



2017 and 2018 have shown to be the lowest total number of birds of the Target Species recorded in the survey to date.

## Others of the Target Species in the Breeding Season

The following list of birds, which were originally included with the target species, have not been recorded in sufficient numbers to enable any useful graphs to be produced for them. They have therefore been excluded from the list, although any sightings are still recorded. They are: -

### Merlin

Recorded occasionally in four areas, except Kimmerr Lough, and mainly seen in April but there has been no evidence of breeding.

### Golden Plover

Alnwick Moor seems to be the favourite area for these, with flocks numbering from 19 to 400 recorded in the April surveys on six occasions. They would at that time be on their way to their breeding territories in the north.

### Jack Snipe

Very occasional records of single birds, mainly in the autumn passage.

### Woodcock

Often seen during the winter period but no records of any breeding in any of the areas being surveyed

### Nightjar

A record from Alnwick Moor of a pair during May 2009 and another from the adjoining area of Hulne Moor, which may have been a breeding pair. The area in which they were recorded would seem to be very suitable for breeding.

### Raven

There have been a good number of records from most of the survey areas of Ravens. They are increasing their range to the east and are recorded in increasing numbers. A pair were recorded in late February in the Hulne Moor area and another pair were seen on two occasions at the Black Lough, both of which may have been breeding pairs. Ravens are very early breeders and could possibly have completed their nesting before the start of our breeding period of surveys had commenced.

## **Conclusions**

Despite the relatively small amount of data gathered by the survey, an attempt to compare these with National averages appears to be the only way to achieve the aims of the survey.

Taking into account the ten years of the survey, the following table is a comparison which should be viewed critically.

In view of the fact that there is a reduction in numbers of many species it might be taken as a satisfactory result if the local population of any species is being maintained at a constant level.

### **Species with higher counts of breeding population than National averages.**

Skylark. (Red listed)  
Whinchat (based on very small counts). (Amber listed)  
Yellowhammer (based on small numbers). (Red listed)  
Stonechat. (Black listed.)  
Grey Partridge. (Red listed)

### **Species with lower counts than the National average.**

Song Thrush. (Red listed)  
Red Legged Partridge. (Black listed)  
Linnet. (Red listed)  
Reed Bunting. (Amber listed}

### **Species with little variation from the National averages.**

Red Grouse. (Black listed)  
Pheasant (affected by birds released for shooting). (Black listed)  
Snipe. (Amber listed)  
Carrion Crow. (Black listed)  
Wren (weather related). (Black listed)  
Lapwing. (Red listed)  
Mallard. (Amber listed)  
Buzzard. (Black listed)  
Curlew. (Red listed)  
Meadow Pipit. (Amber listed)  
Wheatear (based on small numbers). (Amber listed)

## Winter 2018/19.

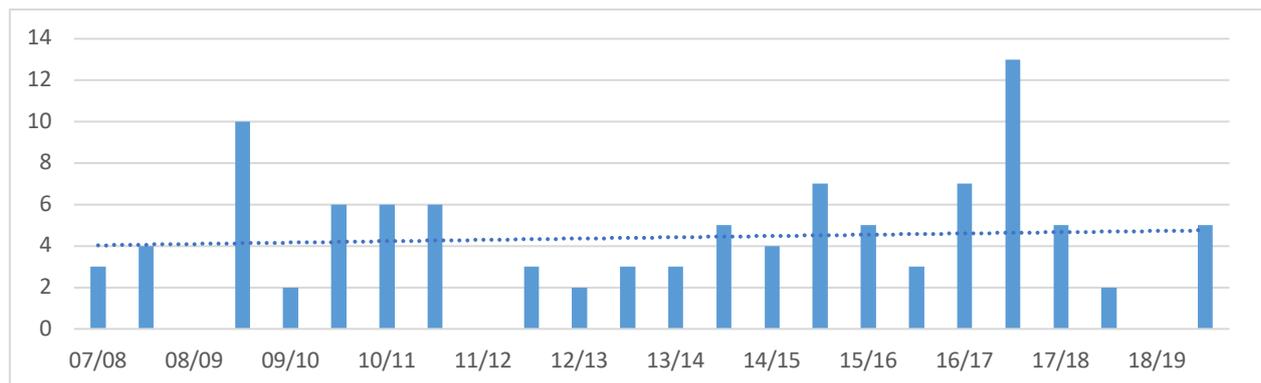
This has been an exceptionally mild winter with very few frosts, one short period of snow cover for a few days and in early March a heavy fall which only affected some parts of our area but was gone within a day or so. The milder than average temperatures have continued into the spring and encouraged early growth in many plants.

Barn Owl behaviour has been of great interest and has continued into spring with many birds observed hunting in full daylight. One theory is that Field Voles suffered severely in the very dry summer of 2018 but conditions have been very suitable for them since then for the population to increase again. It is recognized that Field voles regularly have a cycle of Boom and Bust, over a period of approx. four years, and this could very likely be the cause of the problem.

Wren numbers are also below par. Summer 2018 was too dry for many insects to breed well and this may well be the result but again conditions have been good since then and the winter temperatures should not have affected their survival rate too badly.

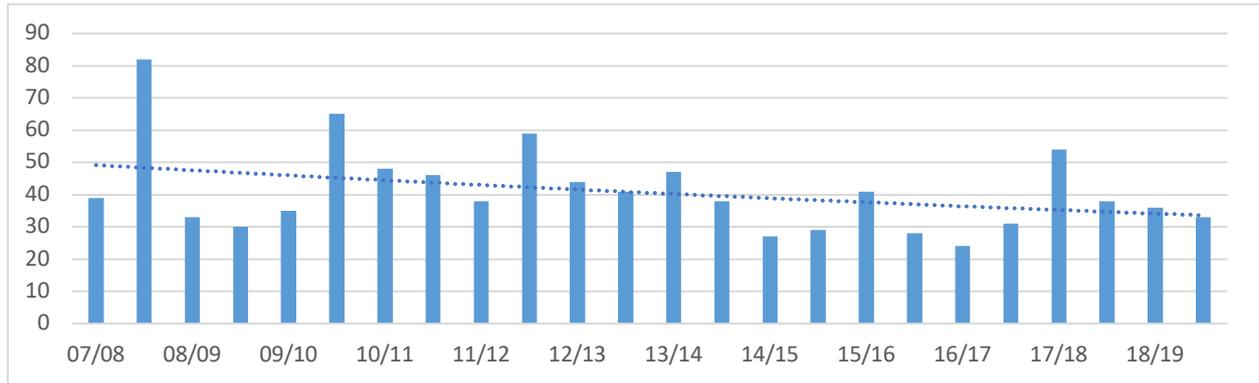
All species are recorded through the winter period, but sightings can be very irregular and numbers are usually quite low. Most species which breed on our moorlands are semi migratory, often not leaving this country but moving to coastal areas or to places where food and shelter are more readily available. The areas of moorland covered by the survey are usually quiet in the winter and total counts can be very small. Nothing would therefore be achieved by creating graphs for most of the target species, but the following three species are of interest although there are no national figures which can be used as a comparison with our records.

## Buzzard



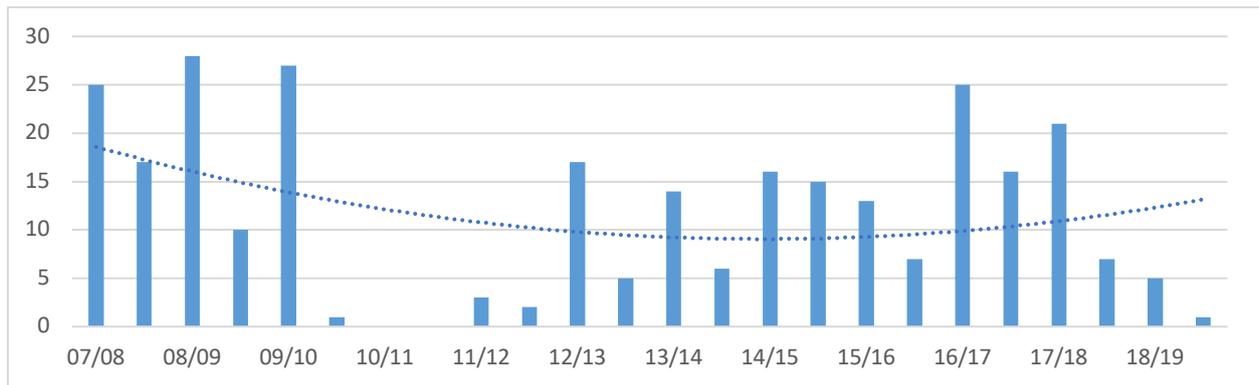
Although there were no sightings of Buzzards in late 2018 the average throughout the survey period remains level in the winter period.

## Red Grouse



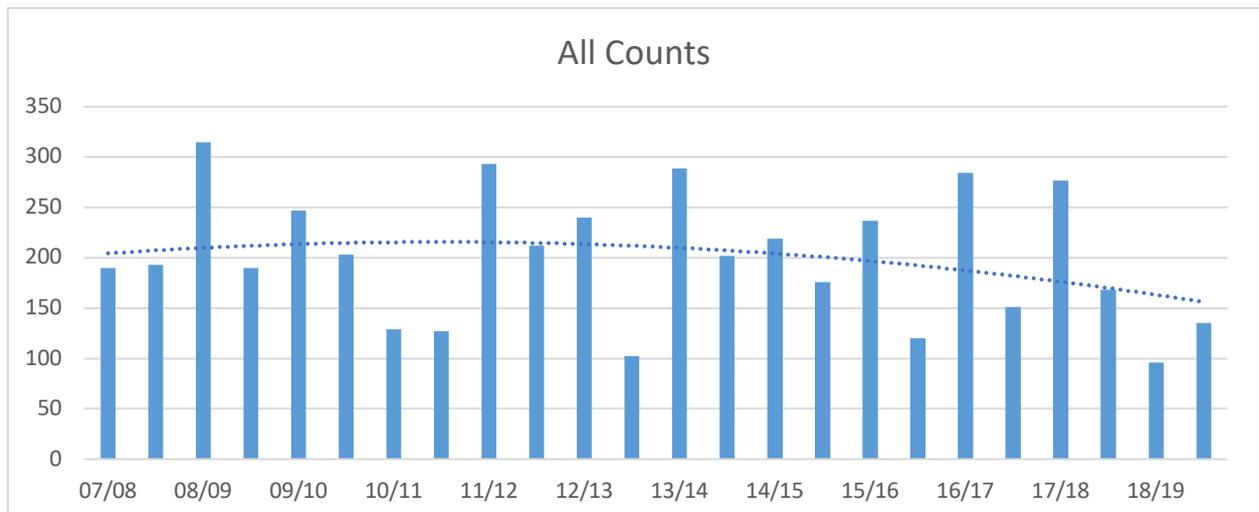
Counts of Red Grouse in the winter have always been higher than in the breeding season when they are much more secretive. After several years without any shooting the proportion of birds that are now mature enough to breed will have increased and form a sound basis for a healthy increase in the population. Hopefully there will be better prospects of an increase in numbers from the main breeding area of Hulne and Alnwick Moors to the other nearby survey areas. This will be made a little more difficult since these are not actually adjoining and are also of comparatively small area.

## Wren



Counts of Wrens in both the summer period and the 2016/17 and 17/18 winters reached a similar level to that of pre-2010, but numbers have subsequently fallen dramatically since then.

## Total of all Winter Counts (Target Species)



Average winter counts in the winter of 2018/19 have been smaller than usual with no obvious explanation.

## Others of the Target Species in Winter

### Meadow Pipit

Mainly move south and west, some into France, Spain, Portugal and Ireland. The few winter records in the survey may well be visitors from the continent.

### Skylark

Few remain in the survey area but move south and east, often being seen in large flocks on the east coastal dunes, with some crossing the channel to winter.

### Lapwing

Flock together and move to coastal areas or to inland lakes and rivers to feed. Occasionally seen in large numbers during surveys nearer the coast or at Branton Ponds for example.

### Curlew

Similar to Lapwing, feeding on the coast, and nearby areas of arable and grassland. Sizable flocks are often recorded at Fieldhouse and Townfoot, where Natural England were initially interested in our records, resulting in extra areas being put down to grass.

### Whinchat and Wheatear

Summer migrants, spending the winter in Africa, where conditions have not been the best for them in recent years, with droughts in the Sahel.

### Stonechat

Some remain in the area, others move into southern UK or France, Spain and Ireland.

### Reed Bunting

Mainly sedentary but leaves the upland in winter, often forming flocks with other finches, Chaffinch, Yellowhammer and Tree Sparrows etc to feed on stubble and game plots in this area.

## **Roundup of the Five Areas**

### **Kimmer Lough - Breeding season 2018.**

Following the severe weather in March it wasn't clear how much effect this would have on returning spring migrants, but in fact the first survey week in late April Willow Warblers were back in force and there were Swallows and both Martin species hawking over the lough. For resident species it may be an indication of late winter mortality that no Wrens were recorded until the June count.

Of the target species there was an unusually high count of Carrion Crows in May when 18 birds were seen. This may simply have been adults with fledged young visiting temporarily from the Bannermoor fields and other neighbouring grazing land, plus some from the Titlington Burn woodland.

Once again no Red Grouse were recorded – a continuation of the almost total absence of evidence of this species from the Kimmer site. In fact only three of this species have been seen in the eleven years of the project here in the breeding season. Even Red-legged Partridge were absent this year, although in May only the sixth Grey Partridge in eleven years was recorded.

Sadly Lapwing, which from 2007 to 2011 were regularly recorded in small numbers, were again absent. Similarly Snipe, which for many years were seen at most visits, were not recorded in 2018.

The only other detail of note on the bird scene concerns Willow Warblers. There was the usual high count of birds at the April visit and again in June there were still 13 birds recorded. But there were none at all seen or heard in May. No explanation easily presents itself for this anomaly and this is the first zero count in 34 spring survey visits to Kimmer.

Roe Deer and Brown Hare were, as usual, recorded in small numbers. Moles continue to be active along the Bannermoor hedge line.

This spring a more concerted effort was made to record plant species and this is reflected in the increased length of the species list at the end of this report. (RP)

### **Kimmer Lough. Winter 2018/19.**

The two winter surveys were carried out in pleasant weather, but neither produced any startling results, either in the target species or in the sightings more generally.

The pattern of Linnet sightings of recent years was maintained with the tendency to see small flocks in December but none in February.

Although not a target species, the good sized flock of Redpoll in February was interesting. They were feeding in the birches in the southern corner of the site, with the birds spending more time foraging on the ground rather than in the trees.

February also added two new species to the winter list. Three Greenfinch were in the scrubby bushes on the east side near the Titlington Burn fence and two Jackdaws had strayed from their normal area in the alders along the burn (which is just outside the site) to be in bushes well inside the boundary.

The Bog Myrtle seemed to be in good health at the February count, although the extensive stands of this shrub rarely seem to produce any bird sightings.

Much of the heather on the higher ground is now quite rank and probably could benefit from some controlled burning.

The continued incursion of whin bushes along the bridle way from point I towards point J and on the down slopes below the cairns at point G continues apace and could possibly be subject to some control measures. (RP)

### **Black Lough.**

The Black Lough has been in the past an excellent site for sightings of Goshawk but there have been no signs of them here since the woodland to the east has been felled.

The Lough itself continues to disappoint with so few water fowl being recorded. Only one Greylag was seen in April and eight in May, but no breeding has been reported. Only one Mallard was seen in May along with one Tufted Duck. Larger numbers of Mallard were seen in the winter period. No Red Grouse were seen during the breeding season with only odd ones in the winter.

A pair of Ravens were present on two of the breeding time visits.

Meadow Pipits, usually counted in good numbers here were found only in reduced counts during the breeding season. Two family parties of Stonechats were seen in May and June, and a group of five Whinchats in June.

Only one pair of Curlew here this year, in the breeding season. There has in the past been more. There was only one record of a Cuckoo at this site this year.

There has been some evidence of Otter activity this spring, which is when the Lough is usually visited. It is interesting to note that the remains of a frog were found from which the eggs had been removed and scattered on the bank side, this had absorbed moisture from rain water and swollen to appear like fully hydrated spawn. One Badger sett has been recorded. Some larger areas of very mature heather have been burned in 2018. This may have been carried out before new regulations regarding heather burning come into force.

At the May visit the following plants of interest were noted-

Climbing Coridalis (in flower)

Marsh Violet.

New Zealand Willowherb.

Chickweed wintergreen.

Woodrush.

Sand Spurry.

(JC)

## **Post Office Pylon.**

Red Grouse appear to be good at keeping their heads down during the breeding season and letting themselves be seen more in the winter. There has been no shooting of Red Grouse here for the last two seasons and it is hoped that there will be a build up in the breeding stock as young birds reach maturity.

A family of Stonechats were recorded in May with odd single birds seen at other visits during the summer and three on February 11<sup>th</sup>, one of which was a male in full breeding plumage. One Wheatear was recorded in April 2018, most probably still on passage. The local population of breeding Wheatears appears to be down to a very low number on any of our survey sites.

Meadow Pipit counts are less than in most years, which is similar to the other moorland sites being surveyed. Being the commonest species on our moors means that any trend in their numbers is more easily recognized. Let's hope that this is just a one-off blip.

Curlews are a regular breeder here, five were recorded in May but not at other visits. Only one Woodcock was seen here during the winter visits.

A considerable number of small areas of heather have now been burned at the POP. In most cases the regrowth has been excellent but one or two on wetter ground seem to have returned initially to moss. Walking here is now much easier. (JC)

## **Alnwick and Hulne Moors.**

Curlew are seen on both of these areas of moorland and have been regular breeders on Alnwick Moor, but this year, Peter Hooley tells us, for the first time they have bred on Hulne Moor. It will be interesting to see if this proves to be a regular extension to their range.

The pool at Freemans Gap is always of interest. In the breeding season it carried several pairs of Mallard, Greylag Geese and one pair of Tufted Duck. In the winter there were a number of Teal to be found.

Good numbers of Red Grouse have been recorded here. These moors hold the bulk of the local breeding stock and it will be from here that it is hoped to populate the neighbouring moorland. Again there has been no shooting for the last two seasons.

A family of 7 Stonechats were seen on Hulne Moor in May with odd single birds recorded on Alnwick Moor. Hopefully they are making a slow but steady recovery in numbers here.

Meadow Pipits have been recorded in reduced numbers on both moors. This is similar to the other sites this year.

Counts of Wrens on the heather ground are still low and do not seem to have recovered here since the 2010/11 weather. Wrens were more or less completely killed out then and will only be repopulated from the lowground when increased population forces them to expand their

territory once more to the heather ground. One would think that heather would be a good hunting ground for Wrens.

During the summer 95 plant species have been recorded and added to the plant list.  
(JC)

## Included with this report

An updated list of plant records for the five areas of the report. There have been very few additions to the list this year. Following the same survey route at each visit limits the number of habitats seen.

A complete list of bird species recorded during this survey.

## **NEBS Vegetation List** (total - 157 species recorded, to June 2018)

Site Key:

**AM** = Alnwick Moor; **BC** = Black Clough; **HM** = Hulne Moor; **PP** = Post Office Pylon; **KL** = Kimmer Lough

### **Trees & Shrubs**

<b>Scientific Name</b>	<b>Common Name</b>	<b>AM</b>	<b>BC</b>	<b>HM</b>	<b>PP</b>	<b>KL</b>	<b>Notes</b>
<i>Alnus glutinosa</i>	Alder	✓		✓		✓	
<i>Betula pendula</i>	Birch, Silver			✓		✓	
<i>Betula pubescens</i>	Birch, Downy			✓		✓	
<i>Crataegus monogyna</i>	Hawthorn			✓		✓	
<i>Ilex aquifolium</i>	Holly		✓				
<i>Picea sitchensis</i>	Spruce, Sitka			✓			
<i>Pinus sylvestris</i>	Pine, Scots			✓		✓	
<i>Rhododendron ponticum</i>	Rhododendron	✓		✓		✓	
<i>Salix aurita</i>	Willow, eared			✓			
<i>Salix caprea</i>	Willow, Goat	✓	✓	✓	✓	✓	
<i>Salix cinerea</i>	Willow, Grey					✓	
<i>Sorbus aucuparia</i>	Rowan	✓	✓	✓		✓	
<i>Ulex europaeus</i>	Gorse	✓	✓	✓	✓	✓	

### **Dicotyledonous Herbs**

<b>Scientific Name</b>	<b>Common Name</b>	<b>AM</b>	<b>BC</b>	<b>HM</b>	<b>PP</b>	<b>KL</b>	<b>Notes</b>
<i>Ajuga reptans</i>	Bugle			✓		✓	
<i>Anagallis tenella</i>	Pimpernel, Bog		✓				
<i>Anemone nemorosa</i>	Wood Anemone		✓			✓	
<i>Angelica sylvestris</i>	Angelica, Wild				✓		
<i>Arctium minus</i>	Burdock			✓			
<i>Bellis perennis</i>	Daisy			✓			
<i>Calluna vulgaris</i>	Heather	✓	✓	✓	✓	✓	
<i>Caltha palustris</i>	Marsh-marigold					✓	Near the lough
<i>Cardamine flexuosa</i>	Bitter-cress, Wavy		✓	✓			
<i>Cardamine pratensis</i>	Cuckooflower	✓					
<i>Cerastium fontanum</i>	Mouse-ear, Common			✓			
<i>Ceratocarpus claviculata</i>	Corydalis, Climbing			✓	✓	✓	Common here but not in rest of UK
<i>Chamerion angustifolium</i>	Willowherb, Rosebay	✓		✓			
<i>Chrysosplenium oppositifolium</i>	Golden-saxifrage, opp-leaved	✓					
<i>Cirsium arvense</i>	Thistle, Creeping			✓		✓	

**Dicotyledonous Herbs**
**(continued)**

Scientific Name	Common Name	AM	BC	HM	PP	KL	Notes
<i>Cirsium palustre</i>	Thistle, Marsh			√		√	
<i>Cirsium vulgare</i>	Thistle, Spear			√			
<i>Cruciata laevipes</i>	Crosswort	√		√			
<i>Digitalis purpurea</i>	Foxglove	√	√	√	√	√	
<i>Drosera rotundifolia</i>	Sundew, Round-leaved	√		√			Insectivorous - in wet peaty ground
<i>Empetrum nigrum</i>	Crowberry		√		√		
<i>Epilobium brunnescens</i>	Willowherb, New Zealand		√				On mossy rocks close to a stream
<i>Epilobium montanum</i>	Willowherb, Broad-leaved	√					
<i>Epilobium palustre</i>	Willowherb, Marsh					√	
<i>Erica cinerea</i>	Heather, Bell	√	√	√	√	√	
<i>Erica tetralix</i>	Heath, Cross-leaved	√	√	√	√	√	
<i>Erophila verna</i>	Whitlowgrass, Common	√					
<i>Ficaria verna</i>	Celandine, Lesser					√	
<i>Filipendula ulmaria</i>	Meadowsweet	√	√	√	√	√	
<i>Fragaria vesca</i>	Strawberry, Wild			√			
<i>Galium aparine</i>	Cleavers		√	√			
<i>Galium palustre</i>	Bedstraw, Marsh		√				
<i>Galium saxatile</i>	Bedstraw, Heath	√	√	√	√	√	
<i>Genista anglica</i>	Petty-whin					√	Germination encouraged by burning
<i>Geum rivale</i>	Avens, Water	√					
<i>Geum urbanum</i>	Herb Bennet			√			
<i>Gnaphalium uliginosum</i>	Cudweed, Marsh			√			
<i>Heracleum sphondylium</i>	Hogweed			√			
<i>Hydrocotyle vulgaris</i>	Pennywort, Marsh		√	√	√		
<i>Hypericum perforatum</i>	St John's-wort, Perforate		√				
<i>Hypericum pulchrum</i>	St John's-wort, Slender	√					
<i>Hypochaeris radicata</i>	Cat's-ear	√					
<i>Linum catharticum</i>	Flax, Fairy	√					
<i>Lonicera periclymenum</i>	Honeysuckle		√				
<i>Lotus corniculatus</i>	Bird's-foot-trefoil			√			
<i>Lysimachia nummularia</i>	Creeping-Jenny		√				
<i>Matricaria discoidea</i>	Pineappleweed			√			
<i>Medicago lupulina</i>	Black Medick			√			
<i>Melampyrum pratense</i>	Cow-wheat, Common	√		√			
<i>Mentha aquatica</i>	Mint, Water	√	√				
<i>Menyanthes trifoliata</i>	Bogbean	√					
<i>Montia fontana</i>	Blinks			√			
<i>Myosotis arvensis</i>	Forget-me-not, Field		√	√			
<i>Myrica gale</i>	Bog Myrtle					√	One of best sites in N'land
<i>Nuphar lutea</i>	Water-lily, Yellow					√	One of only 4 sites in N N'land
<i>Oxalis acetosella</i>	Wood-sorrel			√		√	
<i>Pedicularis palustris</i>	Lousewort, Marsh	√					
<i>Pedicularis sylvatica</i>	Lousewort	√	√		√		
<i>Petasites hybridus</i>	Butterbur					√	
<i>Pinguicula vulgaris</i>	Butterwort, Common	√					
<i>Plantago lanceolata</i>	Plantain, Ribwort			√		√	

## Dicotyledonous Herbs (continued)

Scientific Name	Common Name	AM	BC	HM	PP	KL	Notes
<i>Plantago major</i>	Plantain, Greater			✓			
<i>Polygala serpyllifolia</i>	Milkwort, Heath	✓	✓	✓	✓		
<i>Potentilla anserina</i>	Siverweed			✓			
<i>Potentilla erecta</i>	Tormentil	✓	✓	✓	✓	✓	
<i>Potentilla sterilis</i>	Strawberry, Barren		✓		✓		
<i>Primula vulgaris</i>	Primrose	✓		✓		✓	
<i>Prunella vulgaris</i>	Self-heal			✓			
<i>Ranunculus acris</i>	Buttercup, Meadow			✓			
<i>Ranunculus flammula</i>	Spearwort, Lesser		✓		✓	✓	Common in wet ditches
<i>Ranunculus repens</i>	Buttercup, Creeping			✓			
<i>Rhinanthus minor</i>	Yellow-rattle	✓					
<i>Rubus fruticosus</i>	Bramble, Blackberry	✓	✓	✓	✓	✓	
<i>Rubus idaeus</i>	Raspberry			✓			
<i>Rumex acetosa</i>	Sorrel, Common			✓		✓	
<i>Rumex acetosella</i>	Sorrel, Sheep's		✓	✓			Best on hard peat & burnt ground
<i>Rumex obtusifolius</i>	Dock, Broad-leaved			✓		✓	
<i>Senecio jacobaea</i>	Ragwort			✓			
<i>Stachys sylvatica</i>	Woundwort, Hedge					✓	
<i>Stellaria alsine</i>	Stitchwort, Bog					✓	
<i>Stellaria graminea</i>	Stitchwort, Lesser			✓			
<i>Stellaria media</i>	Chickweed, Common	✓				✓	
<i>Succisa pratensis</i>	Scabious, Devil's-bit	✓	✓	✓		✓	
<i>Taraxacum agg.</i>	Dandelion			✓			
<i>Teucrium scorodonia</i>	Sage, Wood	✓	✓	✓	✓	✓	
<i>Trientalis europaea</i>	Wintergreen, Chickweed	✓	✓	✓	✓	✓	Common here, but not elsewhere
<i>Trifolium dubium</i>	Trefoil, Lesser			✓	✓		
<i>Trifolium repens</i>	Clover, White			✓			
<i>Tussilago farfara</i>	Colt's-foot	✓					
<i>Urtica dioica</i>	Nettle, Common	✓	✓	✓	✓	✓	
<i>Vaccinium myrtillus</i>	Bilberry	✓	✓	✓	✓	✓	
<i>Vaccinium oxycoccos</i>	Cranberry		✓			✓	
<i>Vaccinium vitis-idaea</i>	Cowberry			✓		✓	
<i>Valeriana dioica</i>	Valerian, Marsh				✓		
<i>Valeriana officinalis</i>	Valerian, Common			✓		✓	
<i>Veronica beccabunga</i>	Brooklime		✓				
<i>Veronica chamaedrys</i>	Willowherb, Rosebay			✓			
<i>Vicia sativa</i>	Vetch, Common	✓	✓			✓	
<i>Viola palustris</i>	Violet, Marsh	✓					
<i>Viola riviniana</i>	Dog-violet, Common			✓		✓	

## Monocotyledonous forbs

Scientific Name	Common Name	AM	BC	HM	PP	KL	Notes
<i>Dactylorhiza fuchsii</i>	Orchid, Common Spotted-		✓		✓	✓	
<i>Dactylorhiza maculata</i>	Orchid, Heath Spotted-		✓	✓		✓	
<i>Hyacinthoides non-scripta</i>	Bluebell	✓	✓	✓			
<i>Narthecium ossifragum</i>	Asphodel, Bog	✓	✓		✓		
<i>Potamogeton natans</i>	Pondweed, Broad-leaved		✓		✓	✓	

## Grasses, Sedges & Rushes

Scientific Name	Common Name	AM	BC	HM	PP	KL	Notes
<i>Anthoxanthum odoratum</i>	Grass, Sweet-vernal			✓		✓	
<i>Bromus hordeaceus</i>	Brome, Soft			✓			
<i>Carex binervis</i>	Sedge, Green-ribbed			✓		✓	
<i>Carex flacca</i>	Sedge, Glaucous			✓			
<i>Carex nigra</i>	Sedge, Common			✓		✓	
<i>Carex rostrata</i>	Sedge, Bottle					✓	In outflow ditch from lough
<i>Cynosurus cristatus</i>	Crested Dog's-tail			✓			
<i>Deschampsia cespitosa</i>	Hair-grass, Tufted			✓		✓	
<i>Deschampsia flexuosa</i>	Hair-grass, Wavy			✓			
<i>Eriophorum angustifolium</i>	Cottongrass, Common	✓	✓	✓	✓	✓	
<i>Eriophorum vaginatum</i>	Cottongrass, Hare's-tail	✓	✓	✓	✓	✓	
<i>Festuca ovina</i>	Sheep's Fescue					✓	
<i>Festuca rubra</i>	Fescue, Red			✓			
<i>Holcus lanatus</i>	Yorkshire Fog			✓			
<i>Holcus mollis</i>	Soft-grass, Creeping			✓			
<i>Juncus conglomeratus</i>	Rush, Compact			✓			
<i>Juncus effusus</i>	Rush, Soft			✓		✓	
<i>Juncus squarrosus</i>	Rush, Heath			✓			
<i>Lolium perenne</i>	Rye-grass, Perennial			✓			
<i>Luzula campestris</i>	Wood-rush, Field			✓		✓	
<i>Luzula multiflora</i>	Wood-rush, Heath		✓	✓			
<i>Luzula pilosa</i>	Wood-rush, Hairy					✓	
<i>Luzula sylvatica</i>	Wood-rush, Great			✓			
<i>Molinia caerulea</i>	Moor-grass, Purple			✓		✓	
<i>Nardus stricta</i>	Mat-grass			✓			
<i>Phragmites australis</i>	Reed, Common					✓	Outflow end of lough
<i>Poa annua</i>	Meadow-grass, Annual			✓			
<i>Poa trivialis</i>	Meadow-grass, Rough			✓			
<i>Trichophorum germanicum</i>	Deergrass	✓	✓	✓	✓	✓	

## Ferns & Bryophytes

Scientific Name	Common Name	AM	BC	HM	PP	KL	Notes
<i>Asplenium ruta-muraria</i>	Wall-rue	✓		✓			Both sides of Hulne Park wall
<i>Asplenium trichomanes</i>	Spleenwort, Maidenhair	✓		✓			Both sides of Hulne Park wall
<i>Blechnum spicant</i>	Fern, Hard		✓	✓	✓	✓	
<i>Cystopteris fragilis</i>	Brittle Bladder Fern			✓			Base of wall
<i>Dryopteris borrieri</i>	Borrer's Male Fern			✓			
<i>Dryopteris dilatata</i>	Buckler-fern, Broad			✓		✓	
<i>Oreopteris limbosperma</i>	Fern, Lemon-scented			✓			
<i>Polytrichum commune</i>	Moss, Common Haircap			✓		✓	
<i>Pteridium aquilinum</i>	Bracken	✓	✓	✓	✓	✓	
<i>Sphagnum spp.</i>	Bog Moss			✓		✓	

**NEBS Bird Species List** (total - 107 species recorded, to March 2019)

Little Grebe	Grey Heron	Mute Swan	Greylag Goose
Shelduck	Mallard	Wigeon	Teal
Tufted Duck	Goldeneye	Goosander	Red Kite
Hen Harrier	Common Buzzard	Sparrowhawk	Goshawk
Kestrel	Peregrine Falcon	Merlin	Red Grouse
Red Leg Partridge	Grey Partridge	Quail	Pheasant
Moorhen	Coot	Oystercatcher	Golden Plover
Lapwing	Common Sandpiper	Redshanks	Curlew
Woodcock	Snipe	Jack Snipe	Black Headed Gull
Common Gull	Herring Gull	Lesser B B Gull	Greater B B Gull
Woodpigeon	Feral Pigeon	Stock Dove	Cuckoo
Short Eared Owl	Barn Owl	Nightjar	Swift
Green Woodpecker	Gt Spot Woodpecker	Skylark	Sand Martin
Swallow	House Martin	Meadow Pipit	Tree Pipit
Pied Wagtail	Grey Wagtail	Wren	Duncock
Robin	Redstart	Wheatear	Whinchat
Stonechat	Song Thrush	Redwing	Mistle Thrush
Fieldfare	Blackbird	Ring Ousel	Garden Warbler
Blackcap	Lesser Whitethroat	Whitethroat	Sedge Warbler
Grasshopper Warbler	Willow Warbler	Chiffchaff	Goldcrest
Spotted Flycatcher	Great Tit	Coal Tit	Blue Tit
Marsh Tit	Long Tailed Tit	Nuthatch	Treecreeper
Magpie	Jay	Jackdaw	Rook
Carrion Crow	Raven	Starling	Chaffinch
Linnet	Lesser Redpoll	Twite	Goldfinch
Greenfinch	Siskin	Bullfinch	Crossbill
Reed Bunting	Yellowhammer	Whooper Swan	