

The wintering birds of Courtyard Farm, Ringstead, Norfolk

**A 5-year evaluation of the status of the
wintering birds of a north Norfolk
organic lowland mixed farm**

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by *John R Williamson*

Foreword

Most of us are preoccupied with whether the birds in our gardens and in the countryside breed successfully. It is a common misconception that bird numbers depend entirely on breeding success, hence the widespread concern about the effect of predation on nests and nestlings, despite us knowing that most birds produce far more young than are needed to keep populations stable. Many are horrified when magpies take nests in our garden, but for me, the sight of scattered and broken eggs in the spring tell a different story. I rejoice that a family of stoats, magpies, weasels or jays will be thriving on the huge surplus of eggs produced by birds like pheasants. And I delight when a sparrowhawk uses our bird feeders as a convenient source of live food.

For nearly 40 years, I have been convinced that winter mortality is as, or more, significant to the survival of birds on our farm in Norfolk than how successful they are breeding each spring. In the 1970's, I was monitoring the grey partridge population on Courtyard Farm, using a model developed by a great scientist, Dr Dick Potts, who worked for what is now the Game and Wildlife Conservation Trust. At Courtyard, the autumn numbers and the number of pairs in the spring didn't match Dick's model – we had far higher winter losses than the model predicted. Around that time, Dick himself became convinced that winter mortality was one of the key factors driving down the grey partridge population in the UK. Now those concerned about farmland birds in general, and grey partridges in particular, talk about the hungry gap, initially thought to be in the period from February to March, but now extended to run from January to the end of April. As mixed farming has declined, and fewer farm animals are kept outdoors, and winter cropping of cereals and rape has become ubiquitous, much of our Norfolk farmland has become a bleak and empty place not just during the cold, dark months of winter, but in the early spring too.

I have lived in North Norfolk on and off all my life, and if I had to pick a favourite bird it would be the curlew. Seeing curlew nesting in the Lake District when I was very young, and putting that together with the curlew that came through Norfolk each spring and autumn, first introduced me to the miracle of migration. The late summer arrival of curlew with their haunting call heralds the start of my favourite season of the year. And as a politician, I am delighted that I played a part in ensuring that the curlew was the only bird that the House of Lords insisted should be taken off the shooting list, against the will of the House of Commons, when we debated the 1981 Wildlife and Countryside Act.

So the results of the winter counts that John Williamson has so painstakingly carried out over five years at Courtyard fascinate me. Curlew returned when we converted to organic farming, but John's research shows there is more we can do. For example, on organic arable farms *Phacelia* is widely used as a winter cover (and nitrogen holding) crop, between harvest and sowing spring crops, but John's work shows it is of little benefit to wintering birds. As a result we will be trialling alternatives. Sadly 2011/12 will be the last winter for a while that we have outdoor pigs at Courtyard, and our regular winter bird counts will allow us to evaluate the impact of this change. Finally, work by John and others shows that while organic farming benefits wildlife, we are not immune to changes that affect migratory birds when they leave us, nor can the currently small number of organic farms halt the continuing, infinitely sad, general decline in so many farmland birds that I remember in huge numbers when I was growing up in Norfolk 50 years ago.

Lord Peter Melchett
Managing Director,
Courtyard Farm Ltd.
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Introduction

The following 5-year evaluation of the wintering birds of Courtyard Farm, Ringstead, Norfolk, has been presented in a manner that allows it to be used in conjunction with the 5-year evaluation of breeding birds at the same location (during the years 2006-2010). The paper relating to the breeding bird study was published privately in 2011 for Courtyard Farm Ltd, with a concise version also being published in 2011 in the *Transactions* (Volume 44 Part 2) of the *Norfolk & Norwich Naturalists' Society* as the *Norfolk Bird & Mammal Report 2010* (Ed: Stoddart, A.E., 2011, pp.14-30). Much information regarding the location, geography and history of Courtyard Farm is to be found in the previously published paper on breeding birds. To avoid unnecessary duplication much of that information is omitted here and readers unfamiliar with Courtyard Farm itself are referred to the previously published paper as an introduction to the survey area, or are referred to the farm's website at www.courtyardfarm.co.uk.

A Higher Level Stewardship Scheme is in operation at Courtyard Farm, where visitors can find designated car-parking; around 15 km of permissive pathways and free leaflets that briefly explain both the basics of organic farming and the reasoning behind the conversion of Courtyard Farm to those farming practices. Organic farming principles are based on maintaining a good, healthy soil quality by maintaining nitrogen levels in the soil by growing nitrogen-fixing legumes (clovers, peas and vetch), by growing winter cover crops to hold nitrogen over winter, and by recycling natural organic farm waste. No artificial fertilisers or pesticides are used on the land.

At Courtyard Farm spring wheat and barley, peas and vetch are grown for organic seed, utilising an organic crop rotation practice that leaves autumn cereal stubbles standing over the winter having been under-sown with nitrogen replacement crops such as red and white clover, rye grass and birds foot trefoil. Bare soil is both an uncommon and relatively temporary sight on organic farms as *phacelia*, mustard and cereal rye are also sown in the autumn as nitrogen holding crops, and to control weeds. There are also permanent stewardship grassland and wildflower meadows that benefit from livestock grazing (and the associated soil nourishment) during autumn and early winter.

Organic livestock are reared to high animal welfare standards involving open spaces and natural organic food. Organic livestock are neither routinely treated with antibiotics nor given artificial feed additives and animal husbandry is of the highest standards. Animals on the farm during the survey period included a breeding herd of the traditional and distinctive East Anglian Red Poll cattle for organic beef production. Traditional Duroc x Saddleback and Tamworth pigs are also reared in an open environment for organic pork. Finally, during the early years of the survey period, Cumbrian-bred organically reared Swaledale lambs were brought south to Courtyard Farm for finishing on the clover pastures and turnips under-sown into standing stubble. This practice ceased in the latter years of the survey.

Save for the occasional low intensity woodpigeon and brown rat control, there has been no comprehensive predator control at Courtyard Farm for over 25 years. Whilst there is no game-shooting at Courtyard Farm itself, all of the three immediately adjacent estates are game-shooting estates. On two, large numbers of both common pheasant and red-legged partridge are released annually for autumn shooting. Brown hares, the majority likely being overspill from the high numbers on Courtyard Farm, are also shot there. Whilst shooting does obviously take its toll on wild birds as well as released stock, one estate does also provide additional feed and game cover crops for their stock that clearly benefit other species during the autumn and early-winter before they are ploughed in.

Habitat diversity

Being a mixed organic lowland farm, Courtyard Farm offers a greater diversity of habitats for breeding birds than many intensively farmed non-organic lowland farms:

Grassland

Two large areas of grassland and wild flower meadows are left to flower in spring and summer, and then grazed sympathetically by the livestock during the autumn and early-winter. These meadows have Higher Level Stewardship permissive paths mown through them and walkers are welcomed but are requested to keep dogs on leads at all times to prevent disturbance to wildlife and livestock.

Woodland and plantations

There are two stands of established woodland, planted in 1780-1800, comprising mainly turkey oak in the northern wood (with a variable under-storey of holly, ash, hazel, etc.), and mainly beech and English oak in the central wood southern wood with an under-storey of bird cherry and hazel with some laurel and snowberry. Sycamore, and other non-native trees or shrubs are gradually being

reduced or eliminated. In addition there are several relatively recent plantations (either new plantings or extensions to existing woodland) containing native tree and shrub species such as ash, wild cherry, flowering currant, gorse, broom, field maple, oak, birch, etc. These vary from almost fully grown woodland with little or limited under-storey or ground cover, to very recent sapling plantations with open grass between the saplings.

Ponds

Courtyard Farm has a total of five ponds, varying in surface size and location from two woodland ponds and one orchard pond at c.4-6 m², a field pond of c.12 m² surrounded by scrub and an open livestock paddock pond of c.30 m². All five ponds were dredged and restored during the winter of 2009-10 and surrounding and emergent vegetation has now recovered from the disturbance of renovation.

Hedgerows

Almost all of the Courtyard Farm hedgerows can be traced from Ordnance Survey maps to the period of Enclosure in the 1780s. These hedgerows are mainly quickthorn with some elder that provide an impressive wild harvest of berries and fruits as well as producing suitable growth to provide stock-proof field boundaries. There is also a tree- and shrub-lined 'green lane' crossing the farm in an approximately north-south direction, which in parts pre-dates enclosure, and which from maps, is known at its northern end to have been moved around 1800 to change a triangular field to a more workable rhomboid shape. The more 'modern' part of this hedgerow is notably less productive in terms of natural food for birds than the long-established part. On the farm's eastern boundary, along some pre-enclosure tracks, some hedges exhibit evidence of pre-enclosure plants like blackthorn, gorse and honeysuckle.

Generally speaking the hedgerows in the lower-lying central and southern sections of the farm tend to be denser and come into leaf earlier in the spring than do those on the more exposed northern section of the farm. Hedgerow maintenance is carried out in the widespread modern manner, flailing during the late-autumn and winter with a tractor-mounted hedge-flail, with each hedgerow being cut once approximately every 8-10 years. The cutting process obviously has a detrimental effect on natural food availability for both birds and animals in the first autumn and winter following cutting, but a full recovery is evident in the second season after cutting. On-going plans will see more stretches of the many newer Courtyard Farm hedgerows, consisting of a wide range of native shrubs, maintained with traditional hedge-laying techniques to make them both stock-proof and wildlife friendly.

Commons

Ringstead Common, an area set aside as a fuel allotment ('poors firing') at enclosure, lies at the heart of Courtyard Farm, straddling the Burnham Road. To the north of the road is a patch of thorn and elder scrub over an old sand pit, adjoining a row of field maples that border the winter cattle shed. There is also another patch of thorn scrub at the eastern end of the common; where there is also a small patch of gorse scrub (gorse originally covered the whole of the common). Open grassland lies between the patches of scrub. To the south of the road lies more extensive thorn scrub mixed with ash, field maple, sycamore, etc. and bordered on the southern edge by thorn hedge. The centre of this section of the common is mainly bracken with some small areas of grass at the western end. On the western limit of the farm (south of the Burnham Road), lies Thornham Common, an area of tall thorn and elder scrub with very little under-storey or ground cover, other than grass, that in some ways resembles an orchard. In all cases the thorn scrub areas provide an impressive wild harvest of berries and fruits

Livestock enclosures

Other than the winter cattle shed, an open gabled shelter with slatted wooden sides above masonry lower walls, there are no permanent livestock enclosures on the farm. The cattle are kept on grassland or clover throughout the majority of the year and brought under shelter to feed on silage during the winter. Sheep are contained by electric fencing, spending the autumn grazing on clover or rye grass before going to slaughter. The pigs are also contained within electric fencing, being allowed to root freely whilst being fed supplementary pellets. The pig shelters are constructed from straw bales and a canvas covered frame. All livestock are moved regularly, in the case of cattle and sheep, to avoid over grazing and to distribute natural organic fertiliser, and in the case of pigs, for the same reasons, but also to avoid the land having the surface completely stripped by rooting which can lead to a loss of valuable nutrients in the soil.

The open aspect to the livestock husbandry on the farm gives virtually unrestricted access to the insects that accumulate around livestock on any farm, and during both winter and summer many bird species take advantage of the supply of food that livestock farming provides in one way or another.

Spring-sown arable crops

Spring-sown cereals include both wheat and barley, both grown for organic seed production and harvested in the summer. Spring-sown legumes are peas (vetch is sown in the autumn; both are harvested in the summer and both sown for seed production).

Winter cover crops

Post-harvesting cereal stubble is left standing over the winter, often being under-sown with red or white clover for seed production, red clover to provide both grazing and silage for livestock. All clovers replace nitrogen lost from the soil and remain for three years (the first year growing under a wheat crop). Fodder turnips were also sown into stubbles to provide winter food for the organic Swaledale lambs during the early years of the survey period – this practice no longer takes place.

Post-harvesting both pea and cereal straw is ploughed in before the onset of winter and winter cover crops such as *phacelia*, and sometimes mustard and cereal rye are autumn-sown and spring-ploughed to control weeds, and to hold nitrogen over the winter.

Field headlands and margins

Permanent conservation headlands of 2m, 6m and 20m width are in place on the farm, forming grass and wildflower margins at the base of hedgerows and the edges of woodlands and plantations. Livestock are occasionally allowed to graze headlands in autumn to provide a means of controlling scrub invasion and excessive growth.

Orchards

A small, existing orchard immediately north of the farmhouse, has recently been restored and replanted where necessary, using traditional old English fruiting trees. This orchard is now providing fruit for the farmhouse and also produces a welcome supply of windfalls that provide food for wintering birds.

Farm buildings, stables and outhouses

The name Courtyard Farm is derived from the layout of stables and a flint-walled drying barn, arranged in such a manner as to provide a sheltered and enclosed (now concrete) courtyard. The farmhouse itself, showing Dutch influence in its flintwork structure (although actually these were added in the 1950s) sits immediately north of the courtyard with further stables, outhouses, barns and cottages to the east and south. These buildings provide shelter and some foraging opportunities for a number of passerine bird species during autumn and winter.

Winter bird survey methodology

Lord Peter Melchett of Courtyard Farms Limited first commissioned wintering bird survey work at Courtyard Farm in the winter of 2006-7 to evaluate both the numbers of wintering birds present and the land and crop-usage of those birds on the farm. The survey work was commissioned to compliment the breeding bird survey work that was already being undertaken from the time when organic farming practices were adopted on the farm. Ultimately the intention was to present the collected data in a manner that it can be compared directly against non-organic, intensively farmed, lowland mixed farms elsewhere in the UK. However, this kind of data does not appear to be available in any quantity at present, thus comparison has proven very difficult.

The wintering bird survey was first conducted in 2006-7 to establish both surveying and recording methods and was conducted between late autumn (start of November) and late winter (end of February). The initial trial survey proved successful and informative in both its format and timing. Subsequently, during the winter 2007-8 to 2011-12, the methodology of observation and recording remained virtually unchanged from the initial trial survey enabling direct year-on-year comparison of results.

A total of eight full survey days are carried out during the survey period, two in each calendar month (November through February), spaced as evenly as weather permits during the survey period. Where possible, field survey work is normally undertaken in favourable weather conditions to make recording more practical. In the event of wet and windy weather, when recording is difficult and birds are generally less settled, surveys may be moved by a few days either side of the target dates. Snow cover and low temperatures are unlikely to have an effect on survey dates providing the survey area is

actually accessible. Each survey, covering the entire farm, is started within an hour of first light and usually lasts for the majority of the daylight hours available, particularly in the depth of winter.

The survey technique involves walking transects across fields and counting all birds seen feeding or loafing on the farmland during the survey period (other than numerous woodland-edge species such as wren, robin and dunnoek). Winter thrushes, finch and bunting flocks and tree sparrows are also recorded in hedgerows and at suspended feeders. Owls, raptors, etc. are also recorded and listed in the classified list of species, as are all other casual species recorded during the survey work.

In addition to the above, crop rotation patterns, presence of livestock and habitats were mapped during each survey period allowing analysis of crops/habitat/species relationships.

Table 1 below shows the percentage of each type of habitat and autumn and winter crop cover available in each of the five survey periods.

Table 1: Habitat and Winter Crop cover at Courtyard Farm in winters 2007-08 to 2011-12

Habitat/Crop cover	2007-08		2008-09		2009-10		2010-11		2011-12	
	Area (acs)	% Total area (acs)	Area (acs)	% Total area (acs)	Area (acs)	% Total area (acs)	Area (acs)	% Total area (acs)	Area (acs)	% Total area (acs)
Farm buildings and adjacent paddocks	12.1	1.6	12.1	1.6	12.1	1.6	12.1	1.6	12.1	1.6
Permanent stewardship grass	136.8	18.2	136.8	18.2	136.8	18.2	136.8	18.2	136.8	18.2
Phacelia	163.4	21.8	182.2	24.3	171.6	22.9	196.0	26.1	111.5	14.9
Vetch	62.8	8.4			44.4	5.9	93.7	12.5	101.2	13.5
Phacelia/Vetch mix									71.5	9.5
Trefoil	28.7	3.8	84.0	11.2						
Rye/mustard mix	35.5	4.7	28.7	3.8	29.6	3.9				
Red clover	238.3	31.8	177.4	23.7	186.5	24.9	131.2	17.5	116.5	15.5
White clover	72.7	9.7	96.5	12.9	92.7	12.4	57.0	7.6	98.5	13.1
Stubble (under-sown red clover)			10.4	1.4	10.4	1.4	37.9	5.0	37.9	5.0
Stubble (under-sown white clover)							64.1	8.6	64.1	8.6
Stubble (under-sown trefoil)					66.2	8.8				
Other (weed control)			22.2	3.0			21.2	2.8		
Totals	750.0	100.0	750.0	100.0	750.0	100.0	750.0	100.0	750.0	100.0

Full classified list of species

The full classified list below follows the order of 'The British List: a checklist of the birds of Britain' (7th edition, July 2006), published by the British Ornithologists' Union (BOU) and represents the results of the Courtyard Farm wintering bird surveys conducted during the winter of the years 2007-8 to 2011-12.

The full species list includes all those that have been recorded on or over the Courtyard Farm survey area during the survey period. A number of species have entries in the complete Classified List reading simply 'See Intensively Monitored Species Results'. These species have been monitored more fully than others and are treated in depth in the following section, namely: Intensively Monitored Species Results.

For completeness, and to avoid confusion, the English vernacular names are those first listed (in bold), followed, where relevant, by the International English name as defined by the International Ornithological Congress (in bold, inside parentheses), followed by the species Latin name (in italics following the common English name). On the following line its current status in Norfolk, and its current UK Data List status (both in bold immediately below the species name) are also listed.

PINK-FOOTED GOOSE *Anser brachyrhynchus*

Birds from both the Iceland and east Greenland population are abundant winter visitors in internationally important numbers. Occasional birds from the Spitsbergen population also occur. Amber List

Recorded annually in variable numbers during the survey period, some flocks numbering in excess of 4000 birds. Courtyard Farm lies directly under the flight lines used by birds leaving and entering the Thornham roost and also on the flight line between the Snettisham and Scolt Head Island roosts. Birds feeding in sugarbeet fields on adjacent farms also regularly flight overhead in their thousands. However, as Courtyard Farm does not grow sugarbeet, grounded birds are the exception and usually occur as a result of disorientation during foggy conditions.

GREYLAG GOOSE *Anser anser*

Nominate form a common naturalised resident. Wild birds from the Icelandic population may also occur. Birds of unknown origin showing characters of the Russian form *rubirostris* (Eastern Greylag Goose) noted on a few occasions. Amber List (nominate)

Recorded just once during the survey period when a flock of six flew south-east over Common Breck on 21st January 2009.

SNOW GOOSE *Anser caerulescens*

Nominate Canadian form (Lesser Snow Goose) a rare vagrant. Questionably valid north-east Canadian form *atlanticus* (Greater Snow Goose) has also been reported

A white morph bird showing characters consistent with Lesser Snow Goose was seen in flight over Upper Whins with pinkfeet on 23rd February 2010.

BARNACLE GOOSE *Branta leucopsis*

Birds from the Spitsbergen population scarce or very scarce migrants. Birds from the east Greenland and the Russian/Baltic population scarce or very scarce winter visitors. Also a scarce but increasing naturalised resident. Amber List

One flying south-west over Bottom Breck with Pink-footed Geese on 26th January 2008 constitutes the only record during the survey period.

BRENT GOOSE (Brant Goose) *Branta bernicla*

Nominate west Siberian form (Dark-bellied Brent Goose) a common winter visitor. Birds from the east Siberian population of the form *nigricans* (Black Brant) very scarce winter visitors. Birds from the Spitsbergen, Frans Josef Land and north-east Greenland population of the form *hrota* (Pale-bellied Brent Goose) very scarce, sometimes scarce, passage migrants and winter visitors. Birds from north-east Canadian population of *hrota* may also occur. Red List (nominate) and Amber List (*hrota*)

Although the winter distribution of this goose covers much of the north and west coasts of Norfolk they generally remain coastal in the north-west corner of the county. Hence there is, just one record during the survey period when a flock of 17 Dark-bellied Brent Geese (*Branta bernicla bernicla*) flew west over Barn Breck 3rd November 2007.

EGYPTIAN GOOSE *Alopochen aegyptiaca*

Fairly common naturalised resident

A pair on Ten Acres 19th November 2011 represents the only record during the survey period and was believed to be the first record for the farm.

MANDARIN DUCK *Aix galericulata*

Very scarce naturalised resident

A female frequented the paddock pond adjacent to the farm buildings on 19th November, and again on both 3rd and 16th December 2011. North-west Norfolk has long been associated with the bulk of the few annual records of Mandarin in the county. The appearance of one at Courtyard Farm is undoubtedly linked with the pond restoration program recently undertaken on the farm.

MALLARD *Anas platyrhynchos*

Common resident, passage migrant and winter visitor. Amber List

The very small numbers of feral Mallard of dubious parentage that once frequented the Courtyard Farm ponds have, since the completion of the pond restoration program, been replaced by a much enlarged and vibrant population of semi-wild (or at least less feral), birds peaking at c.30 in total.

RED-LEGGED PARTRIDGE *Alectoris rufa*

Very common naturalised resident

Courtyard Farm is virtually surrounded by shooting estates, some of which release varying numbers of this species into the wild as quarry. Thus, the general trend for Red-legged Partridges is an upward one. Average numbers recorded per winter visit have increased from 31 in 2007-8 to 39 in 2011-12. In 2010-11 there was an unusually large release in the autumn which gave an inflated average number recorded per winter visit with 98 recorded on a visit in early November 2010 and still 75 present in early January 2011.

Winter survival rates of Red-legged Partridges have also increased during the survey period as indicated by the upward trend of late February counts from 13 in 2008 to 38 in 2012. This is most likely the result of a combination of larger autumn releases and the provision of drum feeders (provisionally aimed at Grey Partridges, Tree Sparrows and other wintering finches and buntings) and wild bird seed strips at Courtyard Farm, and large areas of game cover strips and winter feeding on adjacent land.

Red-legged Partridges are widespread in the many different habitats on the farm, most often being found in winter stubbles (including those under-sown with clover and vetch), in wild bird seed strips, in the conservation headlands (including those adjoining woodland edges and hedgerows) and in stewardship grassland.

GREY PARTRIDGE *Perdix perdix*

See Intensively Monitored Species Results.

QUAIL (Common Quail) *Coturnix coturnix*

Very scarce summer visitor in erratic numbers. Amber List

One was flushed from stubble on Two Fourteen Acres on 1st November 2011. This represents the only record during the wintering bird survey of an occasional breeding bird at Courtyard Farm.

PHEASANT (Common Pheasant) *Phasianus colchicus*

Abundant naturalised resident

This species was not fully recorded in the first year of the survey when only groups of 5 or more Common Pheasant were recorded leading to a falsely low average number per winter visit of just seven. In subsequent years all birds were counted individually and the trend since then has been one of relative stability with an average number of birds per winter visit of 33 in 2008-9 and 34 in 2011-12. It should also be noted that numbers recorded from the end of autumn can be erratic as a result of active shoots on adjacent land when birds flushed by beaters will fly in all directions.

Winter survival rates of the wiser and more fortunate individuals of this species can be assisted by the provision of the drum feeders and wild bird seed strips at Courtyard Farm. However, provision of extra winter feed is unlikely to be the governing factor when the mass slaughter by the guns on neighbouring land is considered.

Common Pheasants are widespread in the many different habitats on the farm, most often being found in conservation headlands (including those adjoining woodland edges and hedgerows) and in the stewardship grassland adjacent to the field boundaries. They are also regularly found around the

edges of winter stubbles (including those under-sown with clover and vetch). Common Pheasant is also one of the few species that occasionally find well-grown *Phacelia* to its liking.

LITTLE EGRET *Egretta garzetta garzetta*

Fairly common and increasing resident. Amber List

A single record on 20th January 2007. It should be noted that this was recorded during the initial surveys prior to the five-year survey period commencing winter 2007-8. This lone individual was seen feeding on recently a vacated pig enclosure on Bottom Breck. Footprints and bill marks in the soft mud indicated that the prey items were below ground, possibly earthworms.

RED KITE *Milvus milvus milvus*

Scarce passage migrant and newly-established breeder, increasing following reintroductions elsewhere in England. Amber List

One flew south-west over Lower Whins 1st February 2008 – an unusual winter record at the time of recording, though Red Kites have subsequently become considerably more numerous at all times of the year.

MARSH HARRIER (Western Marsh Harrier) *Circus aeruginosus*

Fairly common resident, summer visitor and passage migrant. Amber List

Marsh Harriers were recorded with ever greater frequency during the survey period as wintering numbers (roosting in the reedbeds along the north coast) continue to increase.

Most records relate to adult females, with smaller numbers of juveniles and males, reflecting the mix of birds roosting nearby.

HEN HARRIER (Northern Harrier) *Circus (cyaneus) cyaneus*

Nominate Palearctic form a scarce winter visitor and passage migrant. Nearctic form (Northern Harrier or Marsh Hawk) a very rare vagrant. Red List (nominate)

Birds of the nominate form recorded annually in small numbers, almost certainly from north coast roost sites. Most records refer to 'ringtails' (adult females and first-winter males and females) though there are also occasional records of adult males.

There is also a single record of the Nearctic form, *Circus cyaneus hudsonius*, when a first-winter male, identified from photographs, was seen hunting over Chalk Pit 25th January 2011

SPARROWHAWK (Eurasian Sparrowhawk) *Accipiter nisus*

Fairly common resident, passage migrant and winter visitor. Green List

Although not a Courtyard Farm breeding species, there are at least two territories located in woodland in close proximity to the farm. Hence it has been regularly recorded in all periods during the winter bird survey.

One particularly large adult female was seen to attack both a red-legged partridge and a stoat during the winter of 2011-12.

BUZZARD (Common Buzzard) *Buteo buteo buteo*

Fairly common and increasing resident and passage migrant. Green List

With the north-west quadrant of Norfolk holding the core county breeding population of this species there has been no shortage of records throughout the survey period with birds regularly flushed from woodland and seen soaring overhead. Indeed, on fine, sunny days in the latter weeks of each annual survey period it is not unusual to see several birds soaring together over woodland.

ROUGH-LEGGED BUZZARD (Roughleg) *Buteo lagopus lagopus*

Very scarce irruptive passage migrant and winter visitor

There were two records during the survey period. A juvenile flew north-west over Hatchet Breck 24th November 2010 and in a strange coincidence another juvenile also flew north-west over Hatchet Breck 21st January 2012.

KESTREL (Common Kestrel) *Falco tinnunculus*

Fairly common resident and passage migrant. Amber list

Recorded annually, if rather sporadically, during the full survey period. Never numerous, both males and females have been recorded annually with prospecting pairs often noted in the latter days of February.

MERLIN *Falco columbarius*

British form *aesalon* a scarce passage migrant and winter visitor. Icelandic form *subaesalon* (Icelandic Merlin) may also occur. Amber List (both forms)

A single record of a male perched briefly on a hedgerow on Clapper Hills 20th December 2008, before flying off west.

PEREGRINE (Peregrine Falcon) *Falco peregrinus peregrinus*

Scarce passage migrant and winter visitor, and recent breeder. A bird showing characters of the Russian or North American forms *calidus/tundrius* (Tundra Peregrine) noted on at least one occasion

An adult male was noted west over Clapper Hills 18th November 2006, south-west over Horse Breck 23rd December 2006, north over Black Hean 10th February 2007 and again west over Black Hean 3rd March 2007. All four records are thought to relate to the same bird and occurred in the initial pre-survey period before the full survey started in the winter of 2007-8. During the latter period just one record of an adult female over Hatchet Breck 16th December 2011.

MOORHEN (Common Moorhen) *Galinula chloropus*

Common resident, some evidence of autumn immigration. Green List

Recorded sporadically in the early years of the survey period this species has become more regular of late, presumably as a result of the pond management program recently completed.

At least one Moorhen is often to be found feeding amongst domestic hens or under the suspended seed feeder in the vicinity of the farm buildings.

GOLDEN PLOVER (European Golden Plover) *Pluvialis apricaria*

Common passage migrant and very common winter visitor. Amber List

The lack of bare earth in autumn and winter on organic farms is not conducive to the hosting of large numbers of Golden Plover and most records relate to loafing birds disturbed from adjacent farms rather than feeding flocks. The birds recorded at Courtyard Farm almost certainly originate from nearby Titchwell RSPB and they are regularly seen in the company of Lapwing.

Erratic in appearance with an apparent peak in early November and another in late January, average numbers per winter visit have fallen from 56 in 2007-8, to 41 in 2009-10 and to just 5 in 2010-11 and 7 in 2011-12. The largest flocks recorded were 265 in late January 2007 and 266 in early November 2009. More recently, no flock has exceeded 40 in either 2010-11 or 2011-12.

Feeding golden Plover are recorded in winter stubbles (including those under-sown with clover and vetch), close-grazed areas of stewardship grassland, and in autumn sown vetch and *Phacelia*, (when the acreage of bare earth is at its peak) whilst loafing birds tend to prefer the latter habitat.

LAPWING (Northern Lapwing) *Vanellus vanellus*

Fairly common, though declining, resident and very common passage migrant and winter visitor. Red List

Much of what is written above for Golden Plover also holds true for Lapwing. Although erratic in appearance there has been an apparent decline in the number of wintering Lapwings at Courtyard farm during the full survey period with average numbers per winter visit of 46 in 2007-8 and 41 in 2008-9 considerably outweighing the average numbers recorded per winter visit in the following three winters (maximum 17 in 2011-12. The largest flocks recorded have been 235 in early December 2007, 165 in late December 2008 and 116 in early February 2009.

Feeding Lapwings are recorded in winter stubbles (including those under-sown with clover and vetch), in close-grazed areas of stewardship grassland and in newly sown vetch and *Phacelia*, whilst loafing birds tend to prefer the latter habitat.

KNOT (Red Knot) *Calidris canutus*

Greenland and Canadian form *islandica* (Greenland Knot) a very common passage migrant and winter visitor. Nominate form (Siberian Knot) may also occur. Amber List

One of the more surprising records of the survey, albeit in the pre-survey period, was a flock of 65 flying low west over Bell's Charity 2nd November 2006.

RUFF *Philomachus pugnax*

Fairly common passage migrant and winter visitor. Has bred

There are a number of records during the survey period, presumably all relating to the local wintering population at nearby Titchwell RSPB, and presumably mainly hard-weather related: A flock of 13 were

on Clapper Hills 29th December 2008; 17 were in stubble on Lower Whins 21st January 2009; 5 were feeding with lapwing and Golden Plover on Courtyard 7th February 2009; 2 were feeding in the pig pens during a snow storm at Upper Whins 5th January 2010; and 35 flew south over Landing Strip 16th December 2011.

SNIPE (Common Snipe) *Gallinago gallinago gallinago*

Nominate form a fairly common winter visitor and passage migrant, and scarce and declining breeder. Faeroes, Orkney and Shetland form *faeroensis* (Faeroe Snipe) may also occur. Amber List (nominate)

There were two records during the survey period: Two were flushed from long, damp grass on Hatchet Breck 2nd November 2010, and another was flushed from there on 24th November. Perhaps without coincidence, both these records were associated with a good arrival of Woodcock.

WOODCOCK (Eurasian Woodcock) *Scolopax rusticola*

Fairly common passage migrant and winter visitor and scarce breeder. Amber List

Recorded annually during the survey period in fluctuating numbers. Arrival of Continental immigrants often noticeable in late November with numbers sometimes increasing during hard weather periods. Maximum daily count 15 on 20th February 2011. On one occasion a group of 5 were flushed from an area no more than a metre square where their 'forms' were clearly visible in rough grass beneath a bramble bush.

CURLEW (Eurasian Curlew) *Numenius arquata*

Common passage migrant and winter visitor. Amber List

As with other wading bird species recorded at Courtyard Farm, the wintering Curlew have their origins at Titchwell RSPB where they roost when not feeding. Their appearance at Courtyard Farm has become predictable and their evocative calls can be heard ringing out from the farmland.

Average numbers per winter visit have fluctuated quite strongly from 25 in 2007-8, up to 52 in 2008-9, before falling to just 11 in 2009-10. More recently averages of 20 in 2010-11 and 31 in 2011-12 have been affected by periods of absence during hard weather at Courtyard Farm when frozen ground has prevented the Curlew from probing their long bill into the soil to search for invertebrates. Recently flock numbers have remained stable at around 40-45 birds but the largest number recorded during the full survey period was 86 in early January 2009.

Curlew are mainly found feeding on winter stubble (including that under-sown with clover and vetch), on stewardship grassland, in autumn sown vetch and in autumn sown *Phacelia* before the plants become taller than c.75mm and spread to infill the bare earth. Curlew do not roost or loaf at Courtyard farm, returning to Titchwell RSPB.

GREEN SANDPIPER *Tringa ochropus*

Scarce passage migrant and winter visitor in very small numbers. Amber List

Just one record in the survey period: one was flushed from the pond on Two Fourteen Acres on 16th December 2012

SPOTTED REDSHANK *Tringa erythropus*

Scarce passage migrant and winter visitor in very small numbers. Amber List

Three were feeding in stubble with Curlew and Ruff on Lower Whins on 21st January 2009. In view of the associating species these birds were almost certainly from the nearby Titchwell RSPB reserve.

TURNSTONE (Ruddy Turnstone) *Arenaria interpres interpres*

Birds from the Greenland and north-east Canadian population fairly common winter visitors. Birds from the Scandinavian population fairly common passage migrants. Amber List

Two were feeding with Lapwing and Golden Plover on Top Twenty on 29th December 2008. Once again, these birds were likely to have travelled with their chosen carrier species from Titchwell RSPB.

BLACK-HEADED GULL (Mew Gull) *Larus canus*

Nominate form a very common passage migrant and winter visitor, and very scarce breeder. Russian form *heinei* may also occur. Amber List

Other than when small numbers of Black-headed Gulls join feeding Common Gulls over arable fields and stewardship grassland their occurrence at Courtyard Farm is intrinsically linked with the presence of livestock, most importantly pigs. Foraging in the disturbed ground of pig enclosures is commonplace but the major factor is the daily availability of supplementary foodstuffs provided in feeding bins for

the pigs. Large numbers of gulls congregate around these feeders, squabbling noisily and often violently. Indeed, in typical gull fashion, it is clear that the daily arrival of many of the gulls is timed to coincide with the arrival of the farm vehicle that tops up the feed bins. The Black-headed Gulls that visit Courtyard Farm roost offshore in Thornham harbour and on the sea off Titchwell RSPB.

The winter of 2007-8 was exceptional for Black-headed Gulls at Courtyard Farm when a maximum of 538 were recorded in early November 2007. Average numbers per winter visit (ignoring the exceptionally high number in 2007-8) show an increase from 92 in 2008-9 to 150 in 2011-12. Recently, flocks regularly number 100-200 strong with a maximum count of 361 in early February 2001. There is a tendency for numbers to decline from autumn through to winter (when hard weather movements may make numbers less predictable) before showing a slight increase again in early spring. It is difficult to ascertain whether this spring increase is due to early returning passage migrants or to a congregation around a readily available food source at a time when food may be scarce.

As previously stated, Black-headed Gull distribution is linked with the location of livestock (and adjacent loafing fields, generally of stubble (including those under-sown with clover and vetch) or low crops like autumn sown vetch and *Phacelia*. In the absence of suitable loafing fields the birds will revert to loafing on bare earth on adjacent farms. Smaller numbers of Black-headed Gulls will also join Common Gulls foraging on the wing over stewardship grassland and the bare earth associated with autumn sown vetch and *Phacelia*.

COMMON GULL (Common Black-headed Gull) *Chroicocephalus ridibundus ridibundus*

Very common resident and winter visitor. Amber List

As with the above species the Common Gulls at Courtyard Farm also roost in Thornham harbour and at sea off Titchwell RSPB. Large flocks can be seen streaming inland at first light, many of them heading straight to Courtyard farm where they immediately begin congregating on and foraging over the stewardship grassland. The arrival of the farm vehicle transporting feed to the pig fields leads to a flurry of activity there before a dispersal to forage over the adjacent fields.

Average numbers of Common Gulls recorded per winter visit have recently shown a steep but steady increase from 159 in 2007-8 and 156 in 2008-9, to 479 in 2011-12, when exceptional numbers were recorded peaking at 798 in early February 2010-11 and 988 in early January 2011-12. There is some evidence of hard weather movements swelling numbers in periods of adverse weather. Flocks of over 500 are now regularly recorded in early spring and it appears likely that this is an indication of return spring passage rather than simply a result of weather related movements.

Common Gulls are less likely to be associated with Black-headed Gulls at the pig fields but do join them in large numbers in the adjacent loafing fields. Though they also exploit the readily available food source provided by pig feed they are more likely to be found foraging on the wing or on foot over stewardship grassland and autumn sown vetch and *Phacelia* when the crops are still relatively short and do not obscure all the bare earth.

LESSER BLACK-BACKED GULL *Larus fuscus*

Western European form *graellsii* (Western Lesser Black-backed Gull) a common summer visitor and scarce, but increasing breeder. Danish and southern Scandinavian form *intermedius* (Continental Lesser Black-backed Gull) a fairly common passage migrant. Birds showing characters of the northern Scandinavian form *fuscus* (Baltic Gull) noted on a couple of occasions. Amber List

Never numerous, this species is recorded in small numbers annually, rarely more than in single figure on any visit. The majority of records occur in late autumn or in early spring, but small and increasing numbers of wintering birds have been recorded in recent years. Almost all records are associated with the pig fields or the adjacent gull loafing areas. Both Continental and Western forms have been identified.

HERRING GULL *Larus argentatus*

British form *argenteus* a common passage migrant and winter visitor, and fairly common breeder. Nominant northern European form *argentatus* (Scandinavian Herring Gull) a fairly common winter visitor. Red List (*argenteus*) and Amber List (*argentatus*)

Always more numerous than Lesser Black-backed Gull, this species is also recorded in small numbers annually with counts in double-figures the exception. The majority of records occurring in late autumn and early spring relate to the British form *argenteus*, but small numbers of Scandinavian *argentatus* have been identified in winter. As with the above species almost all records are associated with the pig fields or the adjacent gull loafing areas.

GREAT BLACK-BACKED GULL *Larus marinus*

Fairly common all-year visitor. Amber List

The least numerous of the large gulls to visit Courtyard Farm, this species has been recorded annually during the survey period but with never more than 5 individuals recorded in any one year. Most records relate to 1st-winter birds and immatures, only very rarely is an adult bird seen.

STOCK DOVE *Columba oenus*

See Intensively Monitored Species Results.

WOODPIGEON (Common Wood Pigeon) *Columba palumbus*

See Intensively Monitored Species Results.

COLLARED DOVE (Eurasian Collared Dove) *Streptopelia decaocto*

See Intensively Monitored Species Results.

BARN OWL *Tyto alba*

Nominate British form a fairly common resident. Continental form *guttata* (Dark-breasted Barn Owl) a very rare vagrant. Amber List (nominate)

Recorded annually during the survey period with an increase in records in recent years. A number of Barn Owl nesting boxes are provided around the farm and although no Barn Owls have bred on the farm in recent years, birds from neighbouring land do hunt over the farm. In recent winters both nesting boxes and cattle shelters have been used as roost sites by up to two Barn Owls.

Ringstead Common and the stewardship grassland and conservation headlands at Courtyard Farm are the favoured hunting grounds of Barn Owls, so much so that they are rarely encountered anywhere else.

LITTLE OWL *Athene noctua*

Fairly common naturalised resident

Two to four pairs of Little Owls have bred on, or immediately adjacent to, Courtyard Farm in recent years. On the most warm and still of winter days they can occasionally be seen during the daytime, roosting in the vicinity of their nesting holes. Both breeding and wintering numbers are currently stable.

Little Owls prefer to hunt from hedgerows, trees and fence posts adjacent to conservation headlands and on the ground in winter stubble and autumn sown vetch and *Phacelia* before the crop height and spread cover the surrounding bare earth.

TAWNY OWL *Strix aluco*

Common resident. Green List

By the far the most secretive of the three owl species breeding at Courtyard Farm, Tawny Owls are only rarely seen in winter, most often when the location of their daytime roost is revealed by the mobbing of and scolding of smaller passerines. At the very end of the winter survey period in each year the local Tawny Owls begin their courtship and can occasionally be heard calling to each other as dusk approaches. However, breeding numbers are currently declining, despite the provision of a number of new nesting boxes, and calling birds are becoming less frequent.

LONG-EARED OWL *Asio otus otus*

Scarce passage migrant and winter visitor. Very Scarce breeder. Green List

There are two records during the survey period: one was flushed from thorn scrub on Common North 20th February 2011 and another was seen at daytime roost, again in thorn scrub, on Ringstead Common on 1st November 2011. Despite checking, this individual was not seen again and may have been the same bird that was found roosting just west of the farm at Thornham Common a little later in the year.

SHORT-EARED OWL *Asio flammeus flammeus*

Scarce passage migrant and winter visitor. Very scarce breeder. Amber List

One record during the survey period: one was roosting in Stewardship Grassland on Courtyard on 18th December 2007.

GREEN WOODPECKER (European Green Woodpecker) *Picus viridus*

Fairly common resident. Amber List

In recent years one to three pairs of Green Woodpecker have bred at, or in the immediate vicinity of, Courtyard Farm. They can occasionally be encountered in winter, most often feeding on the rabbit-

grazed turf of Ringstead Common, or on one of the areas of cattle-grazed Stewardship Grass, often revealing their presence by the characteristic *yaffle* call.

GREAT SPOTTED WOODPECKER *Denrocopus major*

British race *anglicus* a common resident. Nominat Continental form (Northern Great Spotted Woodpecker) a very scarce irruptive visitor in autumn. Amber List (*anglicus*)

Although still the most numerous of the two breeding woodpeckers at Courtyard Farm, Great Spotted Woodpeckers have been in decline in recent years. However, they were encountered on the vast majority of visits during the survey period, often located by their harsh call or by the *tap-tap-tap* sound as they chisel their prey out of the dead wood.

The first drumming males are usually heard on the first fine days of the New Year and will continue proclaiming their ownership of territory ever more loudly and regularly until the end of the survey period in each winter period.

JAY (Eurasian Jay) *Garrulus glandarius*

British form *rufitergum* ('British Jay') a common resident. Amber List

This gaudy but shy corvid is commonplace around the woodland and scrub of Courtyard Farm, often being seen in small groups of two to three, or sometimes more. In autumn they can often be seen collecting fallen acorns in woodland and openly burying them in adjacent stubble and grassland. In winter their presence is often revealed by the raucous cacophony of squawks and hisses they emit at the first hint of danger. Wintering numbers remain stable, usually consisting of two breeding pairs and their offspring.

MAGPIE (Eurasian Magpie) *Pica pica*

Common resident. Green List

Despite the close proximity of keepered shooting estates Ringstead Common hosts one of the largest Magpie roosts in the county and they are omnipresent at Courtyard Farm, often seen swaggering around in boisterous parties on five or more. The roost is not quite as large as it was at the end of the previous century but still regularly numbers around 60-70 birds and currently remains relatively stable. The decline in the size of the roost may simply be as a result of a number of local satellite roosts having become established, e.g., Thornham, Holme Dunes NWT, Titchwell RSPB.

Only groups of five or more Magpies were recorded during the full survey period with annual average numbers per winter visit relatively stable at between 15-20 per visit. There is some evidence of slowly increasing numbers from the turn of the year, peaking at the end of February with maximum number recorded at this time 41 in late February 2008, though the method of recording this species could mean this merely represents a tendency to be more social at this time of year.

Magpies can be encountered almost anywhere on the farm, at any time of the year, but are most regular around the livestock and in stewardship grassland.

JACKDAW (Western Jackdaw) *Corvus monedula*

See Intensively Monitored Species Results.

ROOK *Corvus frugilegus frugilegus*

See Intensively Monitored Species Results.

CARRION CROW *Corvus corone*

Common resident and passage migrant. Green List

The proximity of keepered shooting estates is presumably the reason that this corvid is never numerous. It has bred on Courtyard Farm in very small numbers and this population probably makes up a good percentage of the wintering birds which usually number less than 10, although recent years have shown a small increase in numbers and up to 15 have been recorded on occasions. They apparently prefer foraging on the Stewardship Grassland and the pig enclosures to the open fields.

GOLDCREST *Regulus regulus*

Very common resident, passage migrant and winter visitor. Green List

Present in each winter of the survey period in varying numbers. A small, and recently declining, breeding population at Courtyard Farm is supplemented by incoming autumn migrants in variable numbers. The final two autumns in the survey period produced very small numbers of incoming migrants which when combined with the declining numbers of breeding birds has resulted in very few over-wintering birds.

BLUE TIT *Cyanistes caeruleus*

British form *obscurus* (British Blue Tit) a very common resident. Nominate continental form (Continental Blue Tit) a very scarce irruptive visitor in autumn. Amber List (*obscurus*)

Present throughout the complete survey period in good numbers. However, actual numbers are dictated not only by breeding success at Courtyard Farm, but also by additional winter visitors from local populations, as confirmed by ringing recoveries. Wintering birds are regular visitors to the suspended feeders located around the farm.

Two consecutive poor breeding seasons led to a slight decline in numbers in the early years of the survey period, but wintering numbers are currently on the increase following apparently more successful breeding seasons in 2010 and 2011.

GREAT TIT *Parus major*

British form *newtoni* (British Great Tit) a very common resident. Nominate continental form (Continental Great Tit) a very scarce irruptive visitor in autumn. Amber List (*newtoni*)

A very similar situation to that for the above species: present throughout the complete survey period in good numbers, with perhaps a slightly larger wintering population than Blue Tit. Again, actual numbers are dictated not only by breeding success at Courtyard Farm, but also by additional winter visitors from local populations, as confirmed by ringing recoveries. Wintering birds are regular visitors to the suspended feeders located around the farm.

A poor breeding season in the middle of the survey period led to reduced numbers the following autumn/winter. However, wintering numbers are currently on the increase following a very successful breeding season in 2011.

COAL TIT *Parus ater*

British form *britannicus* (British Coal Tit) a fairly common resident. Nominate continental form (Continental Coal Tit) a very scarce irruptive visitor in autumn. Amber List (*britannicus*)

Very small wintering numbers present throughout the complete survey apparently wholly governed by the breeding population at Courtyard Farm as there is nothing to currently suggest that wintering numbers are swelled by wanderers from other local breeding populations.

Although also insectivorous, wintering Coal Tits are regular visitors to the suspended feeders located around the farm, particularly during periods of hard weather.

MARSH TIT *Poecile palustris*

English form *dresseri* (English Marsh Tit) a fairly common resident. Red List

Very scarce in winter with never more than two birds recorded in any one visit. The very small Courtyard Farm breeding population is apparently close to extinction, thus the likelihood of an improvement in wintering numbers of this species is also very small. Marsh Tit is an occasional visitor to the suspended feeders in hard weather.

WOODLARK (Wood Lark) *Lullula arborea arborea*

Scarce resident and passage migrant. Amber List

Recorded on two occasions (involving one bird) when one was feeding in stubble under-sown with clover on Common South with Skylarks and Reed Buntings on 23rd February and again on 28th February 2006. This is a particularly interesting record as although odd records of winter woodlarks do exist for East Anglia, just exactly where the British breeding population spends the winter is still unknown, but it should be noted that these records occurred during the initial exploratory survey work are thus prior to the commencement of the full survey period.

SKYLARK (Sky Lark) *Alauda arvensis*

See Intensively Monitored Species Results.

LONG-TAILED TIT (Long-tailed Bushtit) *Aegithalos caudatus*

British form *rosaceus* (British Long-tailed Tit) a common resident. Nominate Scandinavian form (Northern Long-tailed Tit) a very rare vagrant. Birds showing characters of *caudatus/europaues* intergrades have occurred on at least two occasions. Amber List (*rosaceus*)

Recorded on all visits throughout the complete survey period, often in mixed flocks with other tit species. Although this species is a known visitor to peanut feeders it has never been recorded visiting the suspended seed feeders at Courtyard Farm.

Long-tailed Tit is known to be susceptible to prolonged periods of hard weather but the relatively short periods of adverse weather in the winters of 2010-11 and 2011-12 appear to have had

little impact on wintering numbers at Courtyard Farm where a strong and currently increasing breeding population exists.

NUTHATCH (Eurasian Nuthatch) *Sitta europaea caesia*

Fairly common resident. Green List

A single record during the survey period: one was in North Wood on 10th February 2007.

WREN (Winter Wren) *Troglodytes troglodytes*

British form *indigenus* (British Wren), an abundant resident. Green List (*indigenus*). Nominate European form *troglodytes* (European Wren), may also occur

Recorded on each visit during the entire survey period. Wrens are known to be susceptible to prolonged periods of hard weather but the relatively short adverse weather periods in the winters of 2010-11 and 2011-12 appear to have had little impact on the breeding population at Courtyard Farm where numbers remain relatively stable. However, it has been noted that in the last two winters Wrens have become vocally territorial a little later in spring than in the earlier years of the survey period.

STARLING (Common Starling) *Sturnus vulgaris vulgaris*

See Intensively Monitored Species Results.

BLACKBIRD (Common Blackbird) *Turdus merula*

Abundant resident, passage migrant and winter visitor. Green List

Blackbird is a common winter bird at Courtyard Farm where numbers are swelled by incoming Continental migrants in autumn. In the best years influxes of over 100 migrants have occurred in late November, at which time the wintering population on the farm is likely to exceed 250 birds.

FIELDFARE *Turdus pilaris*

Very common passage migrant and winter visitor. Red List

Fieldfares arrive at Courtyard Farm in variable numbers each autumn when cackling flocks can be seen raiding the berry-laden hedgerows but once this food source has been exhausted they move to the stewardship grassland, particularly the areas that have been close-grazed by cattle during the autumn, with those that over-winter remaining here until their departure in spring.

In some years weather patterns dictate that many autumn immigrants from Scandinavia and beyond continue south-west over Norfolk without making landfall. In these autumns Fieldfares may be scarce. Maximum numbers of grounded birds recorded at this time of the year during the full survey period was 330 in early November 2007. Numbers tend to increase during late autumn and early winter, peaking around the turn of the year when largest recorded numbers were 661 in late December 2009 and 363 in late December 2011. Average numbers recorded per winter visit during the full survey period are quite varied and range from 53 in 2008-9 to 157 in 2009-10, save for in 2010-11 when average numbers were as low as 12 per visit. It should be noted that hard weather movements at this time of the year can swell, or diminish numbers. Numbers tend to decline in the New Year, once hedgerows have been stripped of berries, but there is considerable evidence to suggest a small return passage of Fieldfares in spring when numbers rise again towards late February.

SONG THRUSH *Turdus philomelos*

British form *clarkei* (British Song Thrush) a common, though declining, resident. Nominate continental form (Continental Song Thrush) a common passage migrant. Red List (*clarkei*)

The small but relatively stable breeding population of Song Thrush at Courtyard Farm ensures that this species is present throughout the autumn and winter period when numbers are augmented by a variable number of incoming Continental migrants.

In late autumn it is not unusual to see small numbers of immigrant Song Thrushes feeding amongst the more numerous Blackbirds in berry-laden hedgerows, and along woodland edges and green lanes. Occasionally at this time small groups of up to 10 Song Thrushes have been noted arriving from the north-east to roost overnight in the Courtyard Farm woodlands.

REDWING *Turdus iliacus*

Nominate form a very common passage migrant and winter visitor. Icelandic form *coburni* (Icelandic Redwing) a very rare vagrant. Red List (nominate) and Green List *coburni*

Another immigrant thrush, Redwings also arrive in (often weather dictated) variable numbers in autumn. At this time of the year maximum numbers recorded during the full survey period were 110 in early November 2007 (accompanied by Fieldfares) and 233 in early November 2008-9.

There is a pattern of increasing numbers during late autumn and early winter, peaking around the turn of the year (as with Fieldfare) when maximum numbers recorded were 190 in late December 2009, and 206 in late December 2011.

Average number recorded per winter visit during the full survey period are variable, ranging between 48-69 during the period 2007-8 to 2009-10, followed by just 12 in a year of migrant thrush scarcity (see Fieldfare) in 2010-11 and a peak year of 108 in 2011-12.

Redwings are very shy birds and those arriving in the autumn are often found foraging in the berry-laden hedgerows but revert mainly to woodland and scrub, where they feed amongst leaf litter on the ground, once this food source has been exhausted. They are occasionally found feeding on fallen fruit in the small but recently re-stocked orchard. Only rarely are any numbers of Redwings recorded feeding in the open on stewardship grassland and when this is the case it is almost always in spring in the company of Fieldfares, and usually on short-grazed grassland.

MISTLE THRUSH *Turdus viscivorus*

Common resident. Amber List

Recorded in small numbers on all visits during the full survey period. Courtyard farm hosts a small and regularly fluctuating breeding population that produces the core of the wintering population.

Flocks of up to 10 Mistle thrushes are not uncommon in early autumn, usually feeding on open grassland, but they become much more solitary in winter and can often be seen vocally defending their chosen berry-laden bush against marauding thrushes into the late winter.

ROBIN (European Robin) *Erithacus rubecula*

British form *melophilus* an abundant resident. Nominate Continental form (Continental Robin) a common passage migrant and winter visitor. Green List (*melophilus*).

One of the most common breeding birds at Courtyard Farm the resident Robin population is augmented in autumn by variable numbers of Continental immigrants.

One of the first songsters to be heard in late-winter and early-spring, Robins are encountered almost anywhere at Courtyard Farm, apart from in open fields, but are most usually found in woodland edge and scrub, and have occasionally been seen foraging under suspended feeders.

STONECHAT (Eurasian Stonechat) *Saxicola torquatus*

British form *hibernans* a scarce resident and passage migrant. Continental form *rubicola* (Continental Stonechat) a scarce or very scarce passage migrant but some breeding birds are also of this form. Green List (*hibernans* and *rubicola*)

Recorded on just two occasions during the survey period: a single male was in the northern hedgerow on Bell's Charity 20th January 2007; two males were in the newly planted hedgerow alongside the Burnham Road on Common North on 2nd March 2008.

The timing of the former record tends to suggest an over-wintering bird that ventured onto Courtyard farm just once, whereas the latter record fits perfectly in the period for spring migrants passing through the county.

DUNNOCK *Prunella modularis*

British form *occidentalis* an abundant resident. Nominate continental form (Continental Dunnock) a scarce passage migrant, mostly in autumn. Amber List (*occidentalis*)

Regularly encountered on all visits during the survey period, Courtyard Farm supports a good, if currently slightly declining resident population of this species. Mainly insectivorous, Dunnocks tend to be found in woodland edge and scrub but have also been seen foraging under suspended feeders in the harshest of winter weather.

HOUSE SPARROW *Passer domesticus*

Common resident. Red List

The cleaning up of farmyard practices, reduced spilt grain during harvesting, renovation of ruined farm buildings for human habitation and changes in building practices have all been cited as contributors in the decline of the House Sparrow in the UK. It had virtually disappeared from Courtyard Farm as both a wintering and breeding bird before commencement of the full survey period, hence there is just one record during the full survey period: a flock of four were in the hedgerow on Home Piece on 10th February 2007.

TREE SPARROW (Eurasian Tree Sparrow) *Passer montanus montanus*

See Intensively Monitored Species Results.

PIED WAGTAIL (White wagtail) *Motacilla alba*

British form, *yarellii* (Pied Wagtail), a very common resident, summer visitor and passage migrant. Amber List (*yarellii*). Nominate continental form *alba* (White Wagtail) a passage migrant, scarce in spring very scarce in autumn that has bred. Green List (nominate)

Small numbers of Pied Wagtails winter annually at Courtyard Farm but double-figure flocks are the exception and only tend to occur in autumn. They are generally most closely associated with livestock and excellent foraging conditions for parties of Pied Wagtails are provided by cattle foraging on stewardship grassland before they go to shed in the late autumn. The disturbed ground of the pig fields is favoured subsequently. Needless to say, any decaying pile of discarded animal bedding or silage will also have its attendant Pied Wagtails.

MEADOW PIPIT *Anthus pratensis*

See Intensively Monitored Species Results.

CHAFFINCH *Fringilla coelebs*

See Intensively Monitored Species Results.

BRAMBLING *Fringilla montifringilla*

Fairly common winter visitor and passage migrant. Green List

Recorded in most winters, but in variable numbers. The wintering population at Courtyard Farm is entirely dependent on incoming migrants and winter visitors.

Most often located in small groups of up to five at the suspended feeders in woodland and around the farm buildings, and rarely at the drum feeders located on field headlands, only rarely do flock numbers reach double figures. Maximum count during the full survey period was 30 (in small flocks at several locations) on 24th February 2009.

GREENFINCH (European Greenfinch) *Carduelis chloris*

See Intensively Monitored Species Results.

GOLDFINCH (European Goldfinch) *Carduelis carduelis*

British form *britannica* a common resident, passage migrant and summer visitor. Nominate Continental form may also occur. Amber List (*britannica*)

Despite a breeding population on the farm in excess of 10 pairs, wintering Goldfinches are unpredictable during the winter months at Courtyard Farm, suggesting that most, if not all of the local breeding population departs the area during winter to be replaced sporadically by immigrants that may form larger flocks. The feeders at Courtyard Farm do not contain the nyjer seed that Goldfinches have come to love in recent years, thus it is relatively unusual for them to be seen at the suspended feeders.

Most autumns see small numbers of Goldfinches visiting stubble fields but only occasionally does a sizeable flock occur during winter, even then they are usually associated with the hedgerows adjacent to the Higher Level Stewardship wild bird seed strips, or game cover strips on adjacent land where supplementary seed is provided for gamebirds.

LINNET (Common Linnet) *Carduelis cannabina*

See Intensively Monitored Species Results.

LESSER REDPOLL *Carduelis cabaret*

Fairly common passage migrant and winter visitor and very scarce breeder. Red List

A sporadic visitor in winter with two records during the full survey period: a flock of four were in Wharton's Belt on 29th December 2008; and more recently a flock of five flew north-west over Landing Strip on 25th January 2011.

BULLFINCH (Eurasian Bullfinch) *Pyrrhula pyrrhula*

British form *pileata* (British Bullfinch) a fairly common resident. Nominate Scandinavian form (Northern Bullfinch) a very rare irruptive visitor in autumn and winter. Central European form *europaea* may also occur. Amber List (*pileata*)

A very secretive species that although not recorded on every visit during the full survey period, was doubtless present throughout. Most usually located by their quiet piping call or by a flash of salmon-pink as a male flies ahead, most Bullfinches are encountered in scrub and woodland edges with Ringstead Common being a particular stronghold.

The small but relatively stable breeding population at Courtyard Farm is doubtless the source of the vast majority of the birds that overwinter at the site.

LAPLAND BUNTING (Lapland Longspur) *Calcarius lapponicus*

Nominate continental form a scarce winter visitor and passage migrant. Greenland and Canadian form *subcalcaratus* may also occur. Amber List (both forms)

An erratic visitor to Courtyard Farm this species is always found loosely associating with Skylarks and other buntings. There are two winter records during the survey period: three were with Skylarks on stubble on Barn Breck on 24th February 2009; and one was with Skylarks and Corn Buntings on grassland on Courtyard on both 3rd and 16th December 2011.

YELLOWHAMMER *Emberiza citronella citrinella*

See Intensively Monitored Species Results.

REED BUNTING (Common Reed Bunting) *Emberiza schoeniclus schoeniclus*

Common resident and passage migrant. Amber List

This is perhaps one of the most difficult species to assess at Courtyard Farm: wintering numbers appeared to be on the increase as counts in the early years of usually related to small groups of up to five at suspended feeders with other finches and tits, save for a flock of 44 on Higher Level Stewardship wild bird seed strip on Courtyard 2nd March 2008. However, following increases in flock sizes at Higher Level Stewardship wild bird seed strips, culminating in the largest flock recorded of 52 on Lower Whins on 3rd December 2010, none were recorded at all in the winter of 2011-12.

There are no Reed Buntings breeding at Courtyard Farm, thus the autumn and wintering populations will presumably consist of both local breeders from the grazing marshes and saltmarshes of the north Norfolk coast and immigrants from further afield. As already stated, both suspended and drum feeders, stubble fields (both first and second year under-sown with clover, vetch and cereal rye) and wild bird seed strips are all attractive to wintering Reed Buntings.

Reed Buntings are also associated with the mixed finch and bunting flocks that are attracted to game cover strips on immediately adjacent neighbouring land, often using the Courtyard Farm hedgerows as sanctuary from hunting predators. These birds, as far as is possible, are excluded from those recorded in the field survey work.

CORN BUNTING *Emberiza calandra*

See Intensively Monitored Species Results.

Intensively Monitored Species Results

As indicated previously, the following section deals solely with the results for those species that have been more intensively monitored. To enable results from this survey to be used in conjunction with those from the Courtyard Farm Breeding Bird Survey 2007-11, included in the list that follows are a number of species present on the UK Farmland Bird Indicator List (as defined by *Defra*). This includes many of the 19 species on the UK Farmland Bird Indicator List but excludes Turtle Dove, Yellow wagtail and Whitethroat (summer visitors), and Kestrel, Lapwing, Reed Bunting and Goldfinch (occurring only in very small and/or erratic numbers during winter at Courtyard Farm).

As referred to earlier, an attempt has been made to determine which species forage in which particular types of habitat on the farm, including any crops standing over the winter months. This relates particularly to the species included in the more intensively monitored list that follows. Unfortunately there appears to be little currently available literature (either in printed or digital form) that allows direct comparison of average numbers of wintering birds foraging on organic farms in the UK so it appears that there is an element of ground-breaking work involved in this survey.

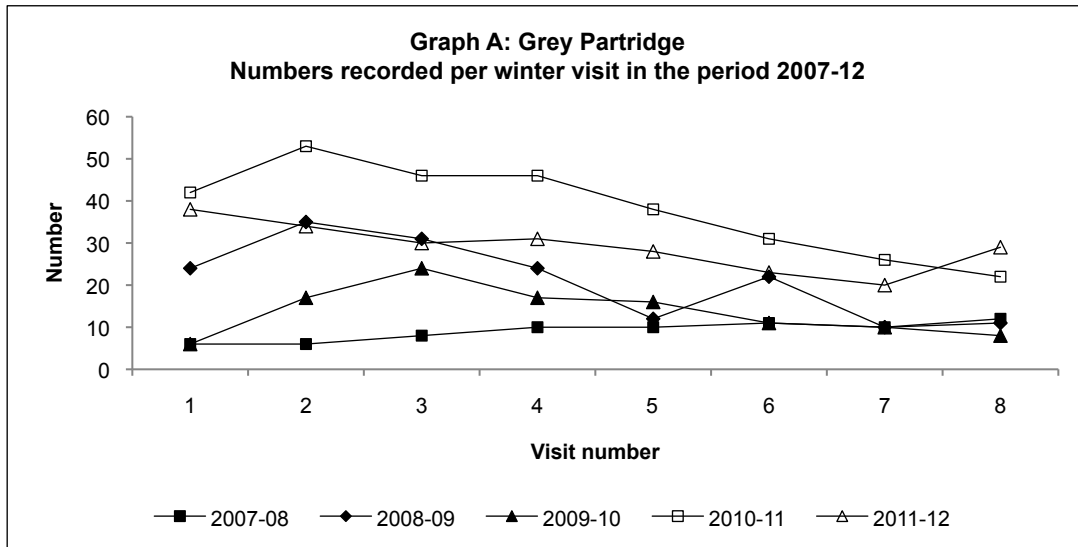
It should also be noted that the field survey was undertaken by walking transects across all habitats on the farm except the woodland, thus not all birds of all species present will have been recorded on every visit made.

In the species reports that follow two graphs have been used to depict changing trends in the numbers recorded for each species. The graphs are intended to illustrate: (a) the number of the species in question recorded on each of the eight visits made annually during the full survey period; and (b): the average number of the species in question recorded over the eight annual visits in each of the five individual survey periods.

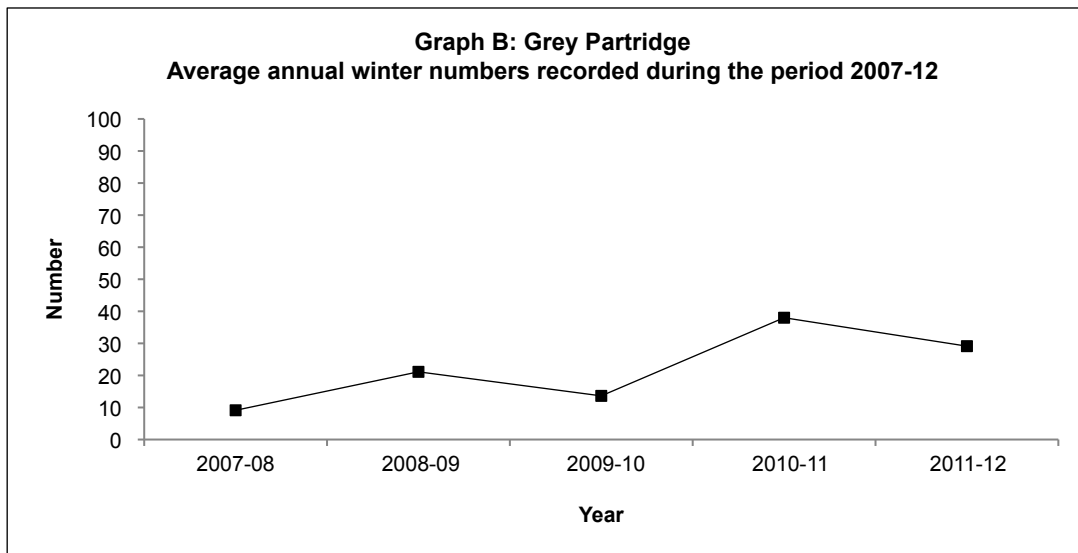
GREY PARTRIDGE *Perdix perdix*

Common resident. Red List

The winter stubbles (including those under-sown with clover and vetch), the conservation headlands and field margins, and the stewardship grassland hold virtually all of the wintering Grey Partridges at Courtyard Farm. Small numbers are also often found on Ringstead Common and very occasionally in vetch crops, but it is very unusual to encounter them in *Phacelia*.



Graph A clearly illustrates the decline in numbers of Grey Partridges present at Courtyard farm from a peak in early autumn through winter to early spring. It is understood that one of the major governing factors controlling breeding numbers of Grey Partridges is winter survival, particularly into early spring when food is apparently very scarce. The above results, particularly those relating to 2010-11 and 2011-12, give signs for encouragement as the number of birds surviving the winter now seems to have an upward trend, most likely having been enhanced by the provision of winter feed drums and wild bird see strips.

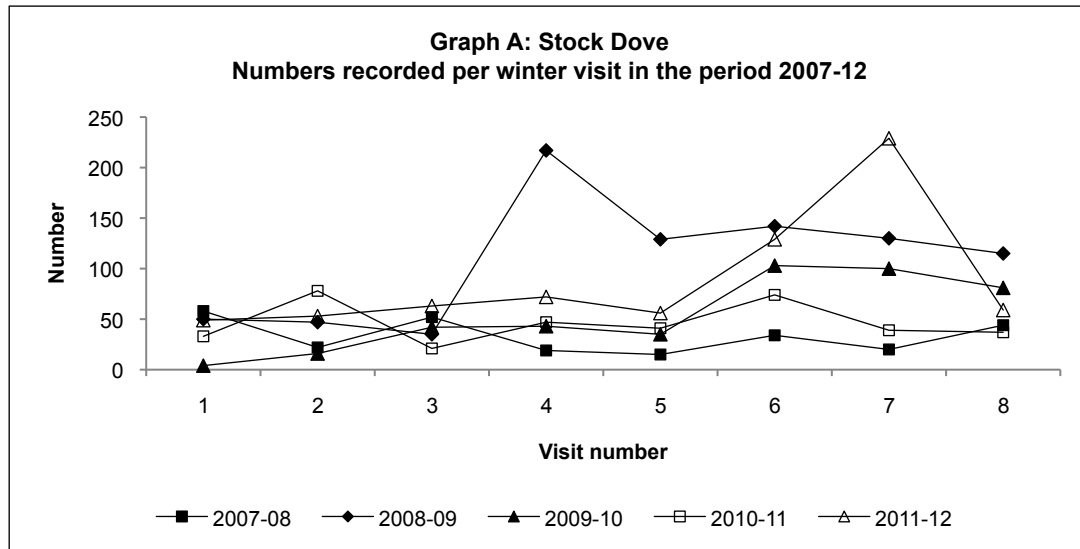


Graph B also shows encouraging signs for the Grey Partridge with a definite trend towards higher annual averages. Both competition for food and nesting sites with released Red-legged Partridges, and the impact of shooting on neighbouring estates (where discrimination between partridge species is unlikely to be made) remain serious threats for the future, but it is pleasing to report that at present Grey Partridges are at least holding their own at Courtyard Farm.

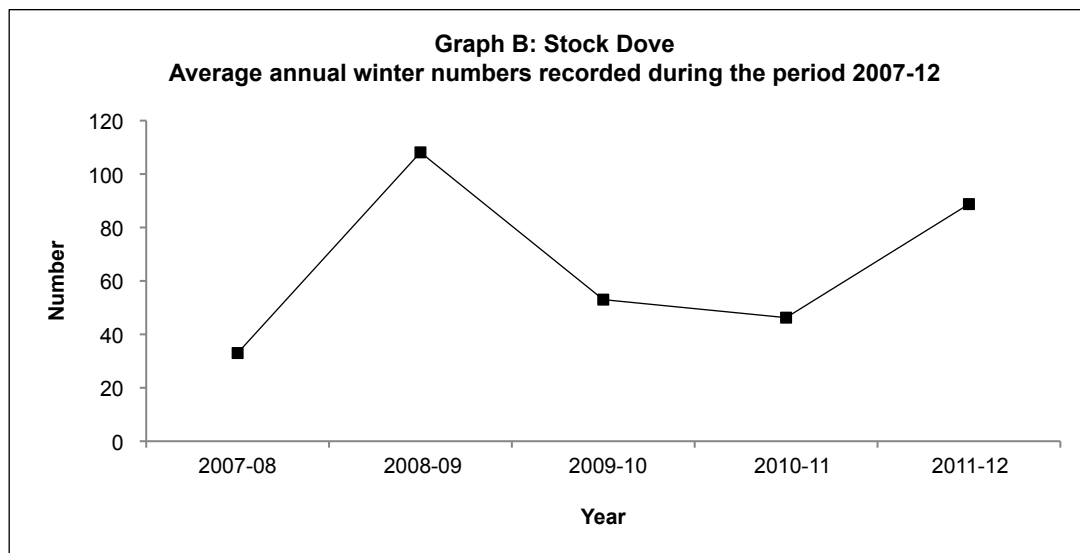
STOCK DOVE *Columba oenus*

Fairly common resident. Amber List

Stock Dove numbers at Courtyard Farm can be quite unpredictable and appear to be at least in part dependent on crops available, particularly from mid-winter onwards when food is likely to be more difficult to come by. Stock Doves occur in variable numbers, predominantly on winter stubbles (particularly those under-sown with vetch, clover and cereal rye) but to a lesser degree on stewardship grassland. However, the larger numbers that periodically occur are most often associated with autumn sown vetch.



Graph A indicates that numbers of Stock Doves at Courtyard Farm are generally quite stable through the autumn and early winter, but can also show a tendency for larger influxes of birds when the preferred feeding conditions are available. Maximum numbers recorded during the full survey period are all from mid-winter onwards, when 217 occurred in late December 2008 (with numbers remaining relatively high through to the end of February) and 229 in early February 2012 (numbers returned to more usual levels by the end of February).



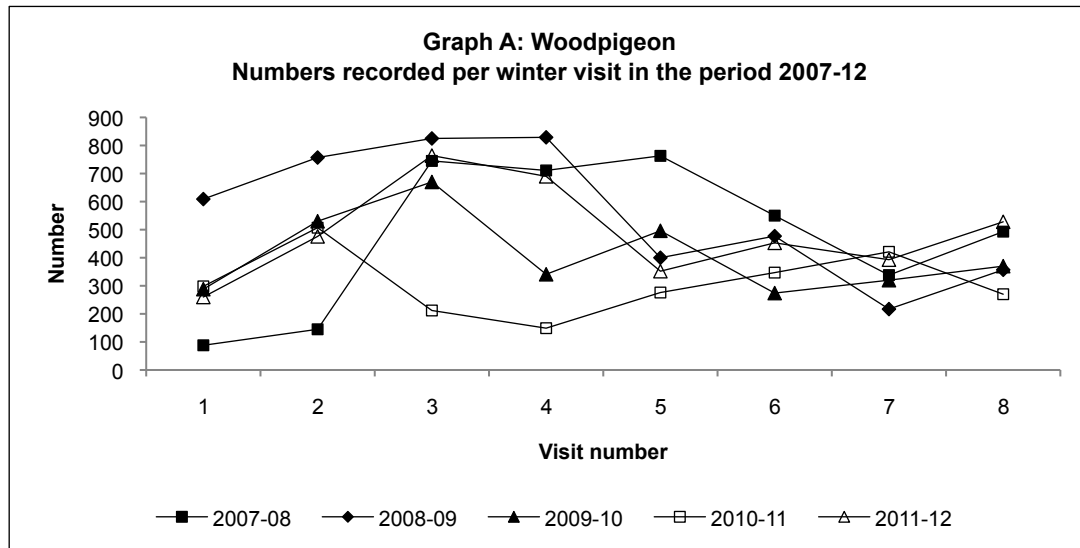
Graph B clearly indicates the dramatic fluctuation in the average numbers of Stock Doves recorded annually per visit during the full survey period, ranging from 33 in 2007-8 to 108 in 2008-9. It is also clear that although the current trend for over-wintering remains relatively stable or slightly increasing, there is also an apparent trend developing where larger (short-term) influxes of Stock Doves can occur from mid-winter onwards, quite possibly linked to the recent replacement of a proportion of the autumn sown *Phacelia* with autumn sown vetch.

WOODPIGEON (Common Wood Pigeon) *Columba palumbus*

Abundant resident. Green List

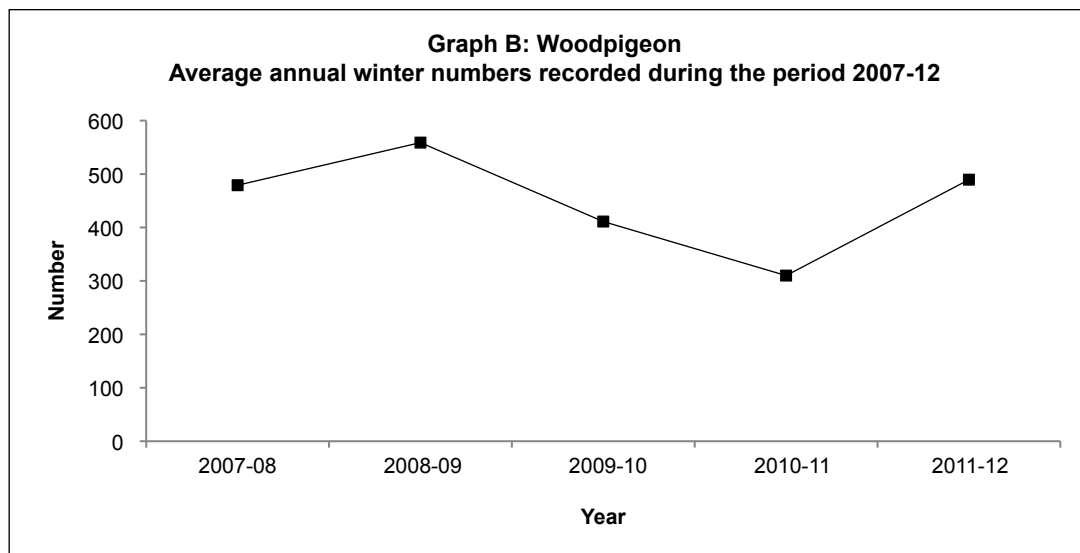
Woodpigeons occur in variable numbers, predominantly on clover and winter stubbles (particularly those under-sown with clover) and in the wild bird seed strips, but also on autumn sown vetch and to a lesser degree on stewardship grassland.

Only minor control of Woodpigeons occurs at Courtyard Farm though the neighbouring farms also have control measures in operation.



There is little doubt that although Woodpigeon numbers at Courtyard Farm are variable, they are also swollen through the late autumn and early winter by incoming Continental migrants, with numbers normally peaking in mid-winter, as indicated in Graph A. At this time it is not unusual to see flocks in excess of 400 feeding on clover, often having been disturbed from adjacent autumn sown rape fields by bird scaring devices.

A decline, albeit a gradual one, then occurs through late winter (when local shooting takes a certain toll) into early spring.



Graph B clearly illustrates the variability in the average numbers of Woodpigeons recorded annually during the survey period. This is most likely linked to the numbers of incoming Continental birds as breeding numbers on Courtyard Farm have shown only a slight increase in recent years.

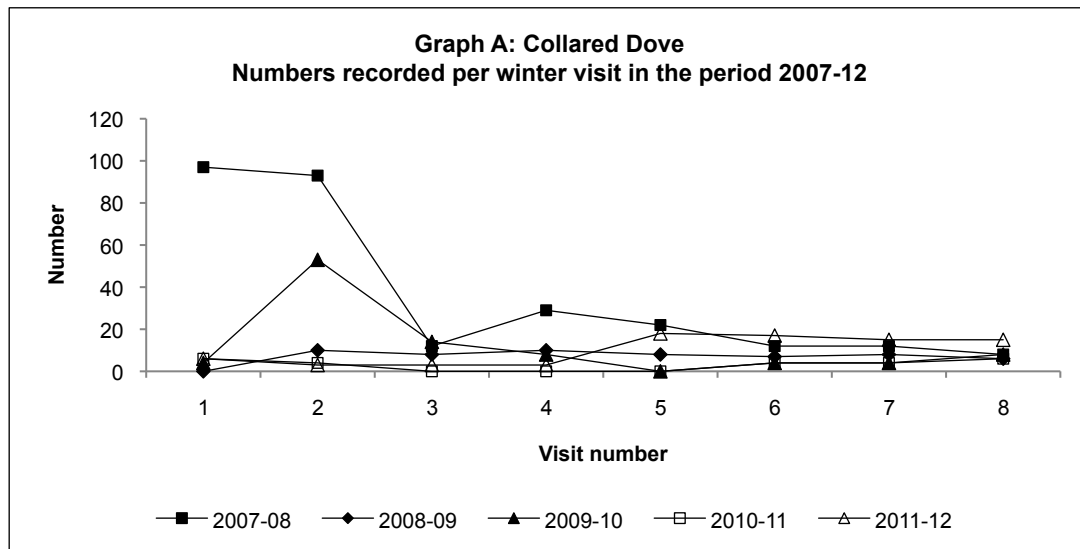
Numbers recorded in 2010-11 show as a trough in Graph B as there was an exodus in the hard weather either side of the turn of the year which was perhaps surprisingly not replicated in the hard weather period in the winter of 2011-12.

COLLARED DOVE (Eurasian Collared Dove) *Streptopelia decaocto*

Common resident. Green List

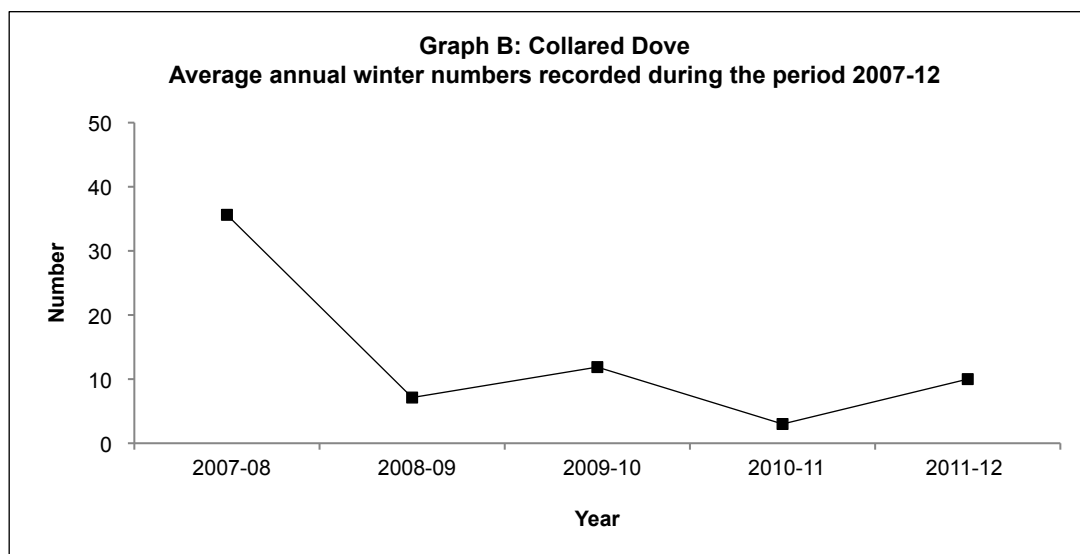
The changing fortunes of the Collared Dove at Courtyard Farm are difficult to fully explain. Clearly the spilt grain of farmyards that fuelled the original population explosion has long been a thing of the past with Collared Doves now equally associated with rural and urban gardens as much as with agriculture, but this does not relate with the sudden decline in Collared Doves noted in early December 2007.

Those Collared Doves that do remain at Courtyard Farm are most often found around the gardens and horse paddocks adjacent to the farm buildings where they regularly feed on spilt grain from suspended feeders.



Graph A clearly shows the dramatic decline in early December 2007, from approaching 100 wintering individuals to just 20 or so. Numbers then remained at that very low level (in both wintering numbers and breeding pairs) until a sudden influx that brought numbers up to 53 in late November 2009.

The likely origin of the birds involved in this influx is from the relatively large and apparently stable populations on farms immediately west of Courtyard Farm. However, by early January 2010 numbers had once again returned to the low levels recorded prior to the influx, and remain so to date. What is difficult to understand is firstly why levels dropped so low in the first instance, and secondly, why the apparently healthy nearby populations do not expand to fill the vacant territory.



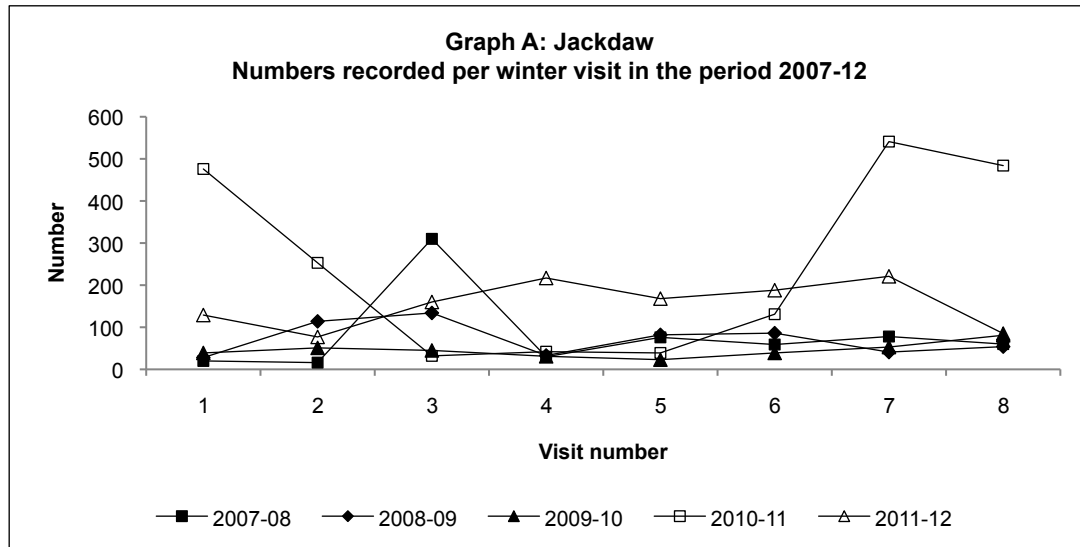
Graph B clearly reflects the demise of Collared Doves at Courtyard Farm with average annual numbers recorded per visit falling from 36 in 2007-8 to just 10 in 2011-12. There is little to suggest any improvement in that situation is imminent.

JACKDAW (Western Jackdaw) *Corvus monedula*

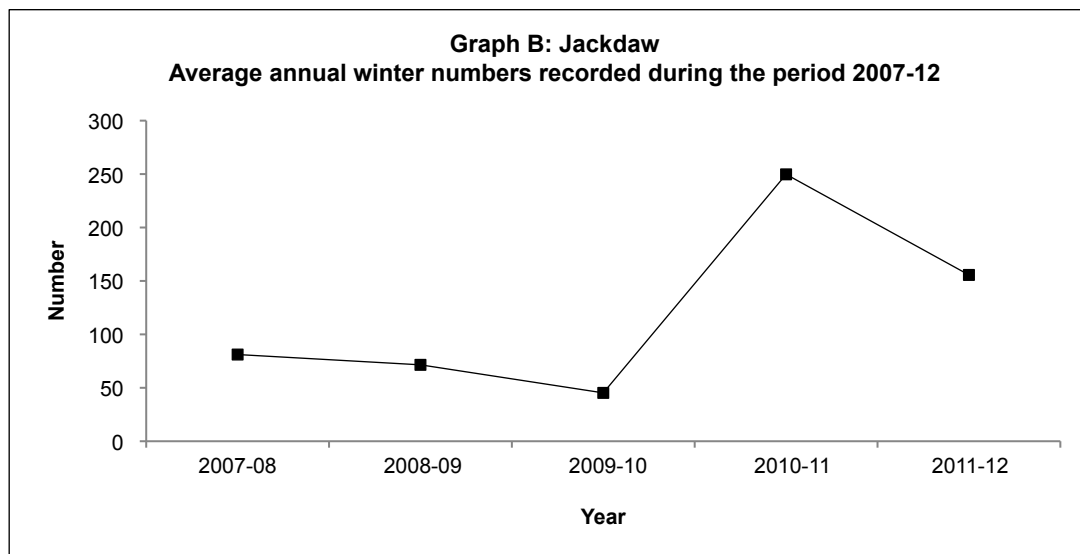
Western European form *spermologus* (Western Jackdaw) a very common resident. Nominate eastern European form (Nordic Jackdaw) a very scarce winter visitor. Green List (both forms)

The stable Courtyard Farm Jackdaw breeding population is augmented by post-breeding dispersal of local birds in early autumn, and quite possibly by incoming Continental migrants in late autumn.

Jackdaws show a strong preference for foraging on the stewardship grassland (both grazed and un-grazed) in autumn, but are also recorded in smaller numbers on autumn sown vetch and *Phacelia*. The use of autumn sown crops is however short-lived, and only occurs whilst the earth is still bare, the Jackdaws soon returning to the stewardship grassland once the young plants begin to cover the bare soil. Jackdaws also appear in numbers around livestock, mainly grazing cattle in the late autumn before shedding, and then around pigs during the winter. Both the foraging activity of livestock and the associated provision of animal feed, present suitable feeding conditions for Jackdaw flock.



Numbers of Jackdaws recorded during the early survey years were relatively stable (as shown in Graph A), save for an early winter influx in 2007-8 when 300 were recorded in early December. However, the latter years of the survey have shown a definite increase. Both the autumn of 2010 and the late winter of 2011 in particular produced high numbers with 476 and 541 respectively. Numbers were also inflated throughout the whole survey period in 2010-11.



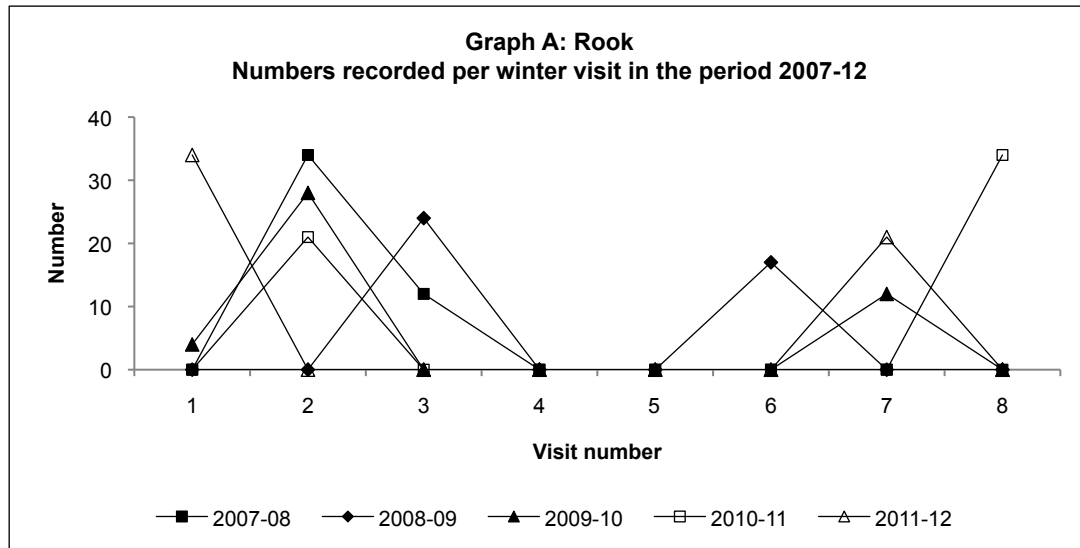
Graph B clearly shows the effects of the large numbers of Jackdaws recorded in both autumn and late winter during the 2010-11 survey period, and the continued inflated numbers recorded during 2011-12.

ROOK *Corvus frugilegus frugilegus*

Very common resident and passage migrant. Green List

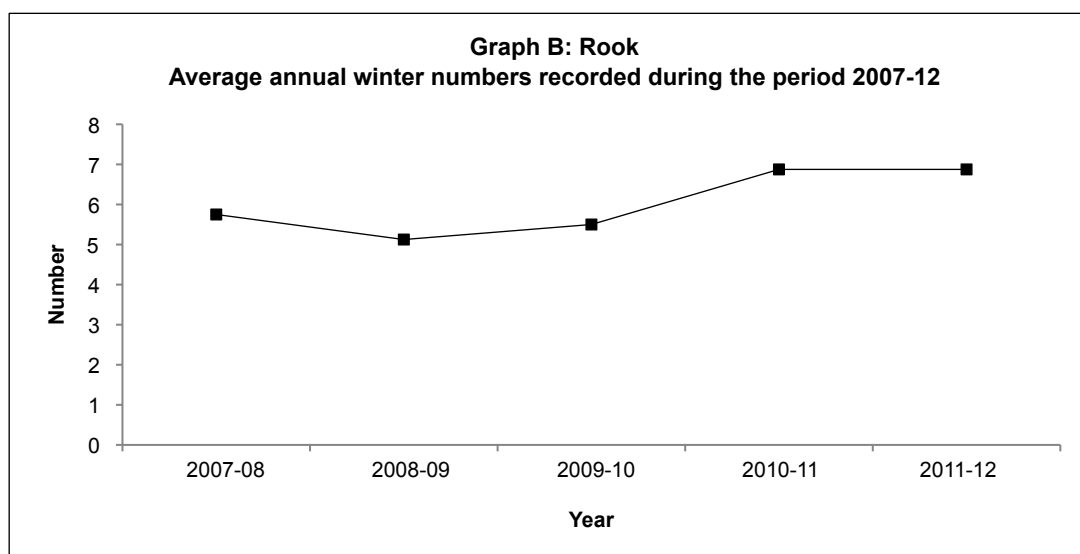
Despite a number of rookeries within apparently reasonable distance of Courtyard Farm, Rooks are scarce visitors to the farm. It is believed that this is likely to be linked to the scarcity of available bare earth; one of the Rooks favoured feeding habitats, on organic farms during the autumn, winter and early spring.

On the few occasions that Rooks are present, they are almost always present in small numbers and closely associated with local Jackdaws. In autumn they can sometimes be found on the bare earth of autumn sown vetch and *Phacelia* crops, and also on stewardship grassland, during late winter and early spring they have only ever been recorded with any kind of frequency when foraging on stewardship grassland, most often that which has been autumn-grazed.



Whilst Graph A may appear both extremely random and chaotic at first glance, it does show the now well established pattern of Rooks visiting Courtyard Farm, where they have only ever been recorded in autumn and late winter/early spring, and never in the depth of winter (late December to early January).

In a strange coincidence the largest number ever recorded on the farm is just 34, but has been recorded in three separate occasions, in late November 2007, late February 2011 and early November 2012.



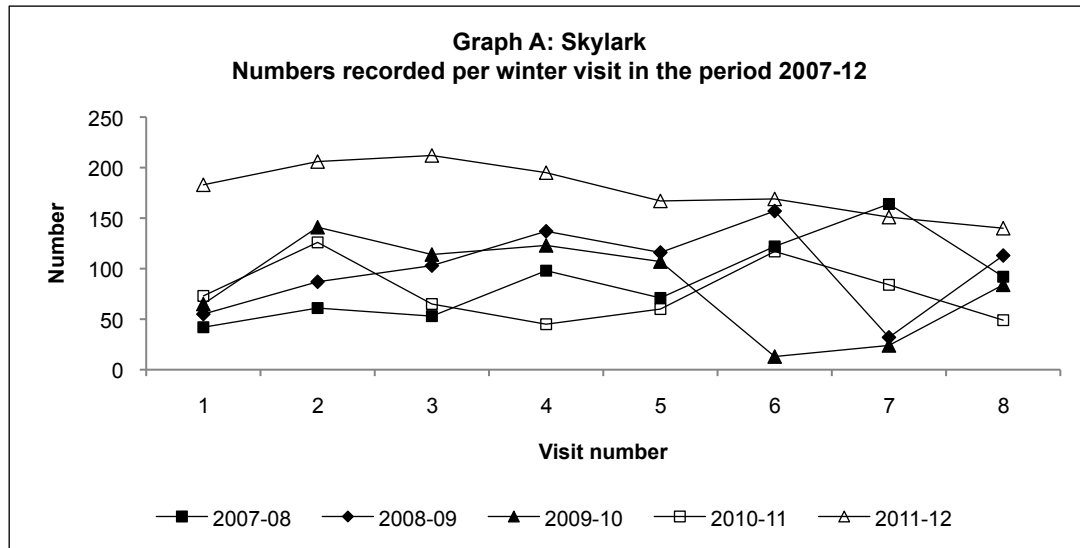
The average annual number of Rooks recorded per winter visit is shown in Graph B to be relatively stable, with perhaps a hint of a slight increase in the most recent survey periods.

SKYLARK (Sky Lark) *Alauda arvensis*

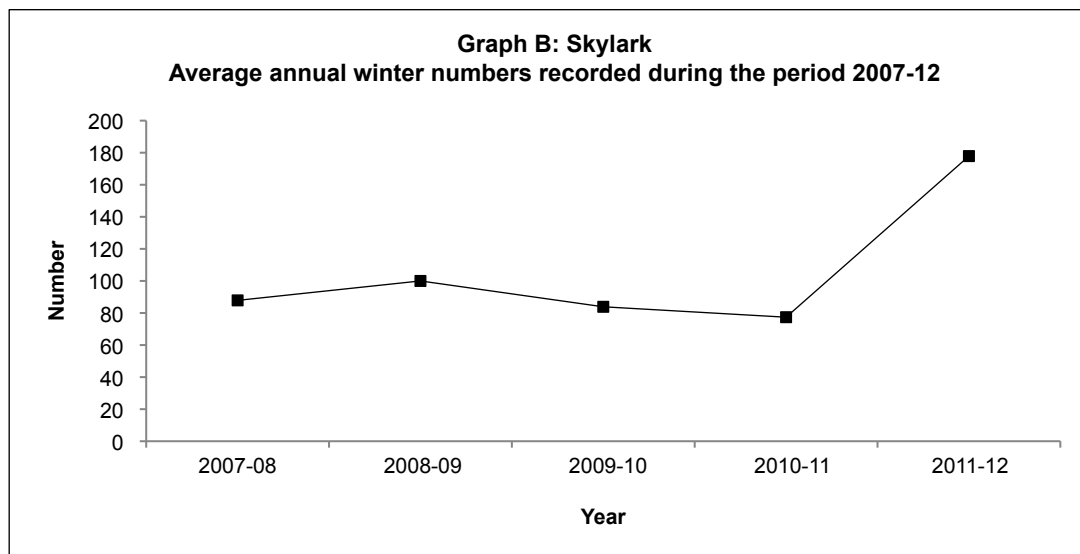
Nominate form a common resident, passage migrant and winter visitor. Birds showing characters of the western Siberian and Central Asian form *dulcivox* noted on a couple of occasions. Red List (nominate)

The winter stubbles at Courtyard Farm are the favoured habitat of wintering Skylarks, whether under-sown or not. Numbers tend to be concentrated on first-year stubbles, where food is more readily available, but the under-sown second year stubbles also host fair numbers. It is also not unusual to find Skylarks in the wild bird seed strips, in clover and in stewardship grass (particularly that which had not grazed in the autumn).

Whilst Courtyard Farm has a strong breeding population winter numbers are swelled by incoming autumn migrants from Scandinavia and the Continent.



Graph A shows relatively stable numbers of Skylarks present throughout the winter and early spring, having reached a peak in late autumn. The effect that periods of hard weather (particularly snow cover) can occasionally have on wintering numbers (particularly in late winter) are shown in the late winter data for both 2008-9 and 2009-10. Graph A also suggests that 2011-12 was a very good winter for Skylarks at Courtyard Farm with 183 already present in early November and numbers subsequently peaking at 212 in early December, then slowly declining, but still remaining at a high level, all the way through to early spring.



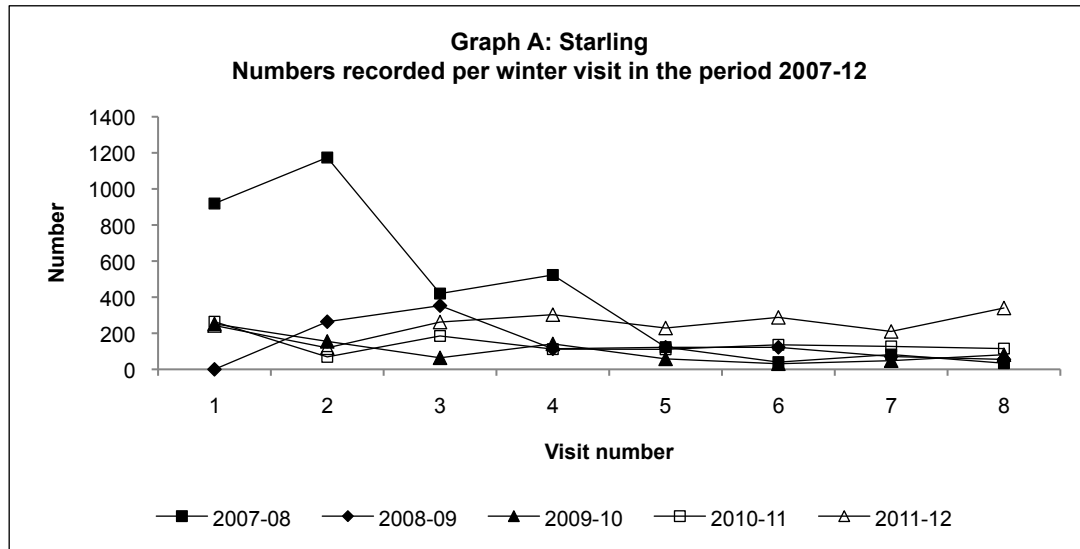
Graph B indicates just how exceptional the winter of 2011-12 was for Skylarks at Courtyard Farm. Average annual numbers recorded per visit had if anything been showing a very slight decline but were effectively doubled in 2011-12.

STARLING (Common Starling) *Sturnus vulgaris vulgaris*

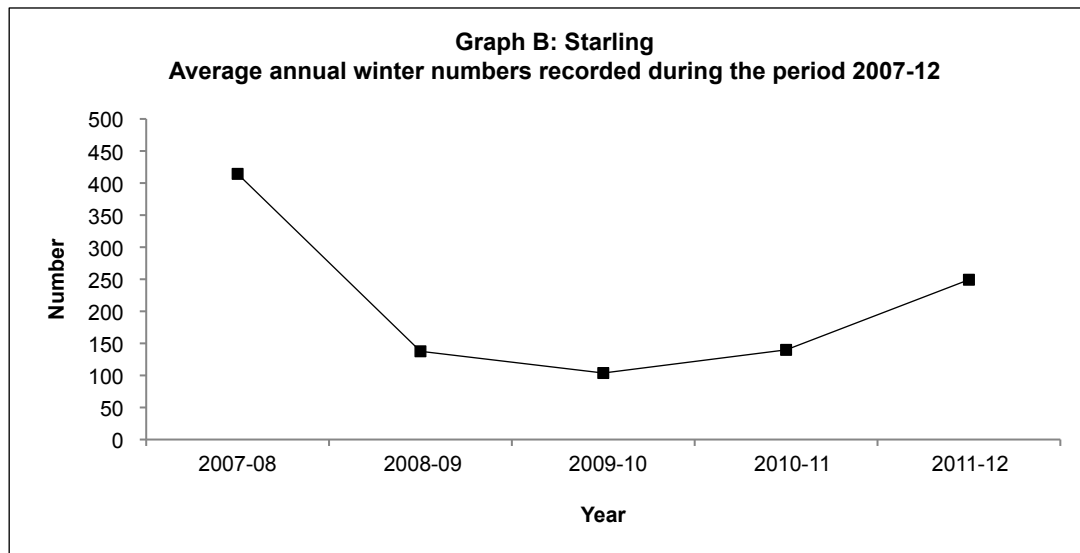
Very common resident, passage migrant and winter visitor. Red List

During autumn Starlings can be encountered in a number of different habitats including winter stubble (including that under-sown with clover, cereal rye and vetch), in wild bird seed strips, on the bare soil of autumn sown vetch and *Phacelia* and once germinated, but whilst still in its infancy. However, by far the most favoured Starling haunts are on the grazed stewardship grassland and around the livestock.

This preference for foraging around livestock increases throughout the autumn and into winter when the major Starling activity becomes concentrated around the pig fields (once the cattle have been sent to shed for the winter).



Starling numbers at Courtyard Farm are almost certainly influenced wholly by Continental migrants with local breeding birds departing south for the winter. In years of strong autumn passage average numbers can be boosted (as shown in Graph A) even though not all of the birds occurring in autumn will remain throughout the winter.



The autumn of 2007 was a prolific one for Starlings at Courtyard Farm with a peak count of 1174 being recorded in late autumn of that year going a long way towards ensuring that average annual numbers during the survey period in 2007-8 remained high (clearly indicated in Graph B above).

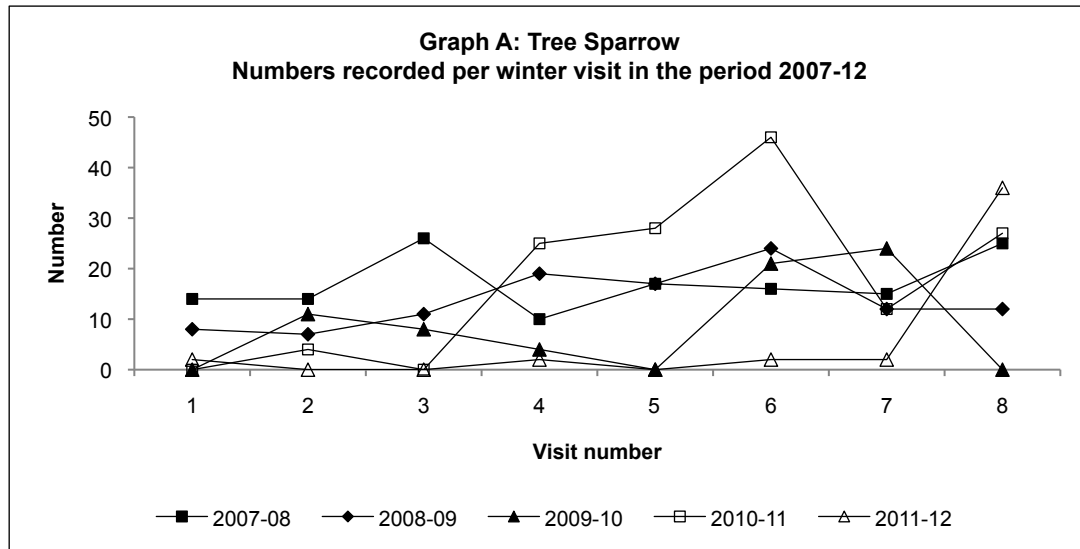
Following the large numbers in 2007-8 there followed a subsequent drop in numbers, but also three survey periods of relatively stability in average annual wintering numbers.

More recently, the period 2010-11 showed a notable increase in Starling numbers with between 119 and 340 Starlings being recorded on each of the eight visits in the period.

TREE SPARROW (Eurasian Tree Sparrow) *Passer montanus montanus*

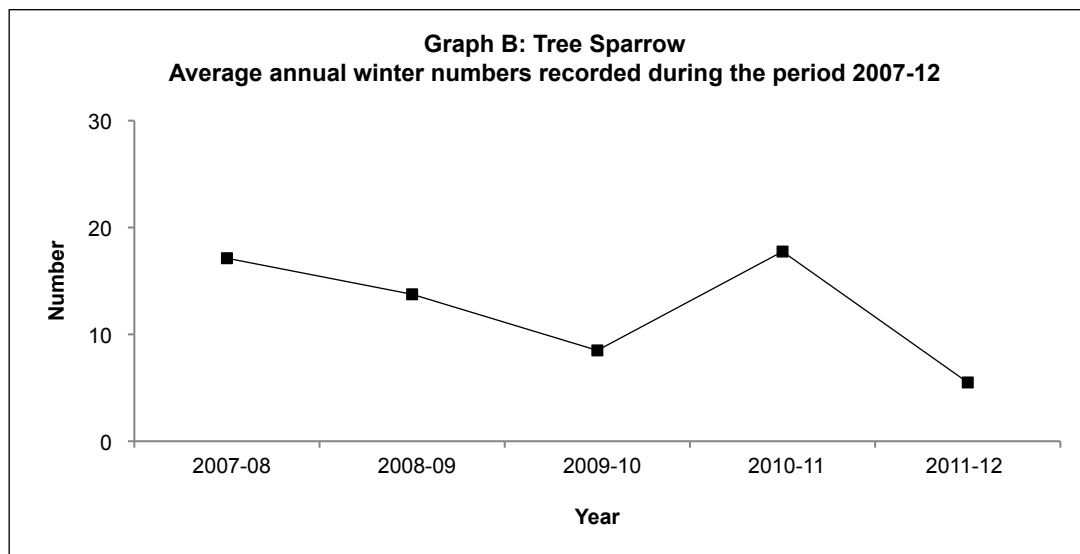
Fairly common resident, passage migrant and winter visitor. Red List

The winter distribution of Tree Sparrows at Courtyard Farm is usually rather predictable. They are found either in winter stubble, wild bird seed strips, or in the hedgerows, bushes and trees around the suspended (and occasionally the drum) feeders that have been provided. In addition, on occasions when wild bird cover for gamebirds is sown in close proximity to Courtyard Farm hedgerows, but on adjacent land, Tree Sparrows can sometimes be found in finch and bunting flocks that use the hedgerows for cover from predators.



The local Tree Sparrow population is currently under close scrutiny by the North West Norfolk Ringing Group. Despite a number of local ringing recoveries it is proving difficult to establish the movements and habits of this complex population.

A recent population crash occurred in the Courtyard Farm breeding population but this has not been wholly reflected in numbers recorded on the Winter Bird Survey where Tree Sparrows have been both erratic in appearance and numbers. Graph A above shows the complexity of the situation well, with very little discernible pattern. It would appear that this lends strength to the theory that there is a great deal of movement within local breeding populations that may even be somewhat nomadic within the locality, thus making it difficult to both survey and evaluate.



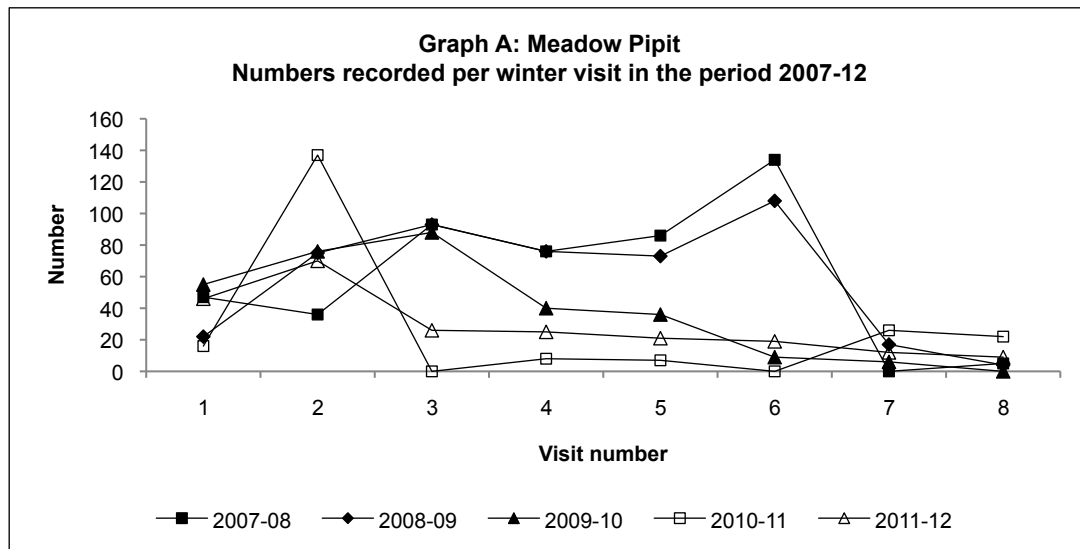
Graph B above further demonstrates the fluctuation in numbers of Tree Sparrows at Courtyard farm with average annual numbers recorded per winter visit varying from just 9 in 2009-10, to 18 in 2010-11.

MEADOW PIPIT *Anthus pratensis*

Nominate form a common resident, summer visitor and passage migrant. Birds showing characters of the questionably valid Irish and western Scottish form *whistleri* (Hebridean Meadow Pipit) noted occasionally in early spring. Amber list (both forms)

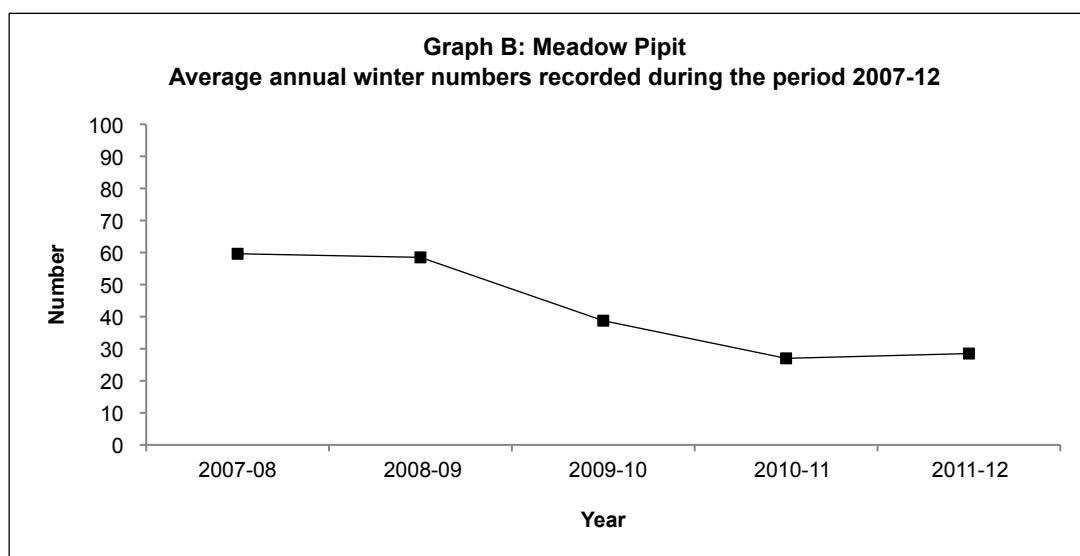
The nearest breeding Meadow Pipits to at Courtyard Farm are as close as the north Norfolk coast yet it is likely that the wintering population there comprises entirely of Continental visitors. Thus numbers recorded annually are somewhat unpredictable and dependent on both the strength of autumn passage and the severity of weather during the mid-winter period.

The most favoured habitats of Meadow Pipits on farm are clover, stewardship grass (primarily un-grazed) and autumn sown vetch fields, the latter still being favoured when all bare earth has been covered by crop growth. Stubbles are also utilised, most notably second year stubbles that have been under-sown with clover or vetch, though first year stubbles are also inhabited to a lesser degree.



The autumn of 2010 produced a strong Meadow Pipit passage (as indicated in Graph A by the peak of 134 in late November). Despite this the hard weather encountered over the winter of 2010-11 caused an exodus between early December and late January before the suggestion of a small return passage in early spring; thus highlighting in this species vulnerability to severe weather conditions.

The autumns of 2007 and 2008 also produced reasonable numbers of passage birds, many of which lingered throughout the winter to produce late January peaks of 108 in 2009 and 137 in 2010.



Graph B above suggests a decline in average annual numbers during the full survey period but this is considered largely a result of hard weather periods during the winters of 2009-10 and 2010-11.

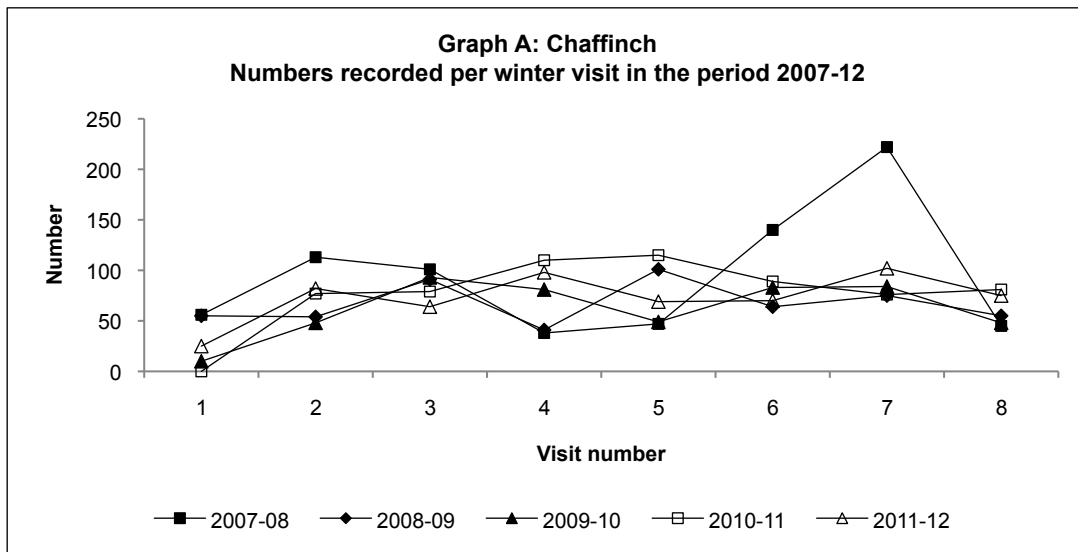
CHAFFINCH *Fringilla coelebs*

British form *gengleri* (British Chaffinch) an abundant resident. Nominate continental form (Continental Chaffinch) an abundant passage migrant and winter visitor. Amber List (*gengleri* and Green list (nominate)

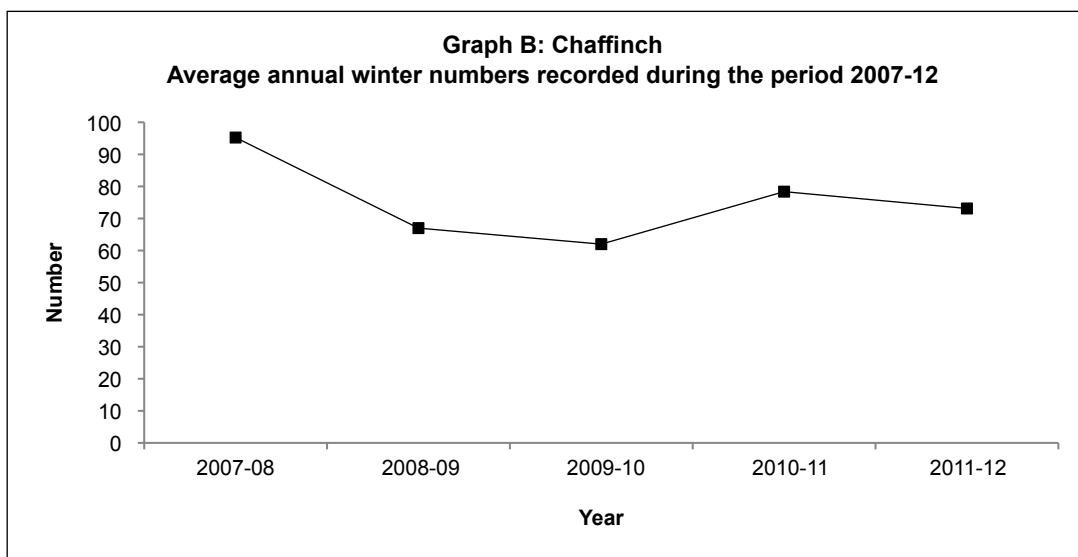
Wintering Chaffinches at Courtyard Farm are most likely to comprise both local birds and birds of Continental origin. Thus there ought perhaps to be an element of unpredictability about numbers recorded. However, other than the large numbers recorded in early February 2008, peaking at 222, there seems to be an established pattern of occurrence.

Chaffinches tend to be relatively widespread in their choice of habitats, occurring in winter stubble, wild bird seed strips, around drum feeders in the hedgerows, and particularly around the suspended feeders on woodland edges and around the farm buildings.

Flocks comprising around 20-30 birds are the norm, but numbers can be larger in harder weather. Large numbers can also flock in hedgerows close to game cover strips on adjacent land. To avoid artificially inflated numbers, where possible these flocks have not been counted during the field surveys.



Graph A above tends to show a recurring pattern in wintering numbers of Chaffinches at Courtyard Farm with, numbers building in autumn and remaining stable throughout the winter period into spring, when numbers begin to fall away as Continental wintering birds depart.



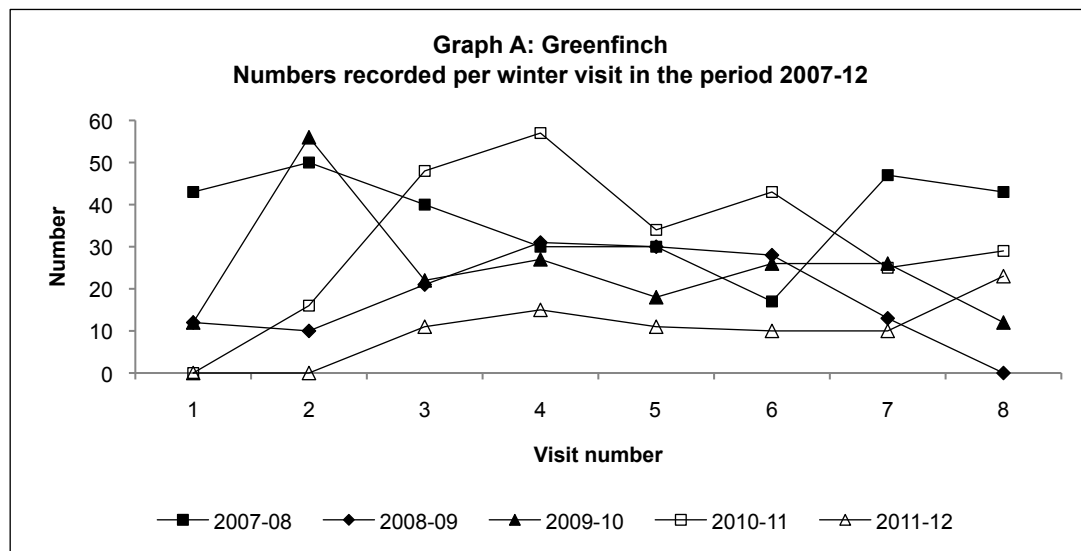
The gentle downward trend shown in annual average numbers recorded per winter visit in Graph B above, suggests that wintering numbers of Chaffinches are in slight decline at Courtyard Farm.

GREENFINCH (European Greenfinch) *Carduelis chloris*

British form *harrisoni* a common resident and passage migrant. Nominate continental form a winter visitor in unknown numbers. Amber List (*harrisoni*) and Green List (nominate)

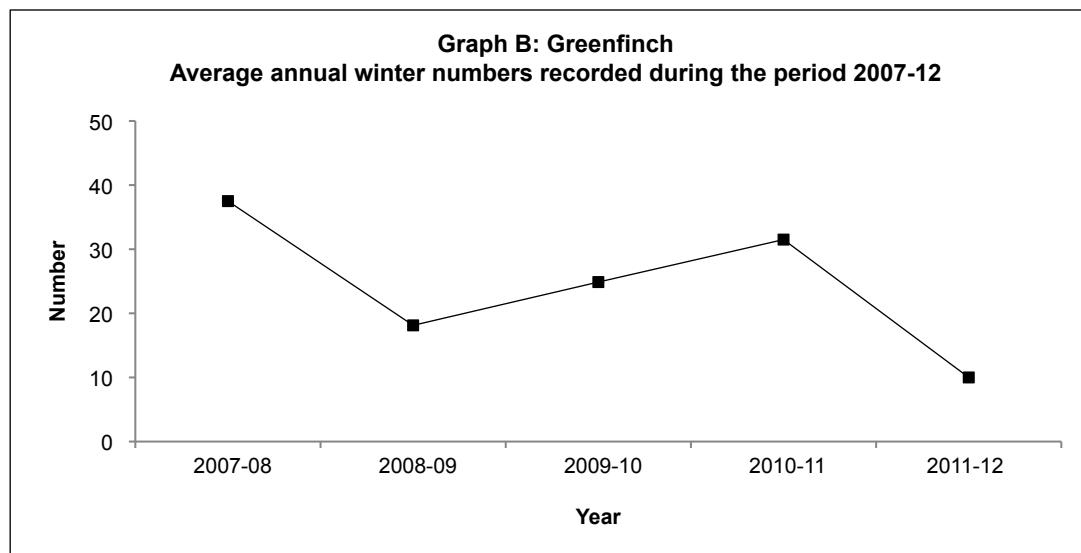
During winter Greenfinches at Courtyard Farm tend to be found in small flocks concentrated around the suspended feeders on woodland edges, and particularly in the vicinity of the farm buildings. On the rare occasions when larger numbers are present they can occasionally be found in hedgerows adjacent to drum feeders, in wild bird seed strips and in mixed finch and bunting flocks in winter stubbles.

As with Chaffinch, larger numbers can occasionally be found in mixed finch and bunting flocks feeding on adjacent game cover strips and where possible these have not been recorded in the field survey counts.



Wintering Greenfinch flocks are most likely to comprise local birds, with an unknown quantity of Continental immigrants swelling their numbers in some years. However, Greenfinch has never been recorded at Courtyard Farm in significant numbers with the largest numbers noted being 56 in late November 2009 and 57 in late December 2010.

Graph A above has a chaotic appearance with an apparent influx of presumed Continental birds in late autumn 2010 adding to the erratic nature. Note the particularly poor year in 2011-12.

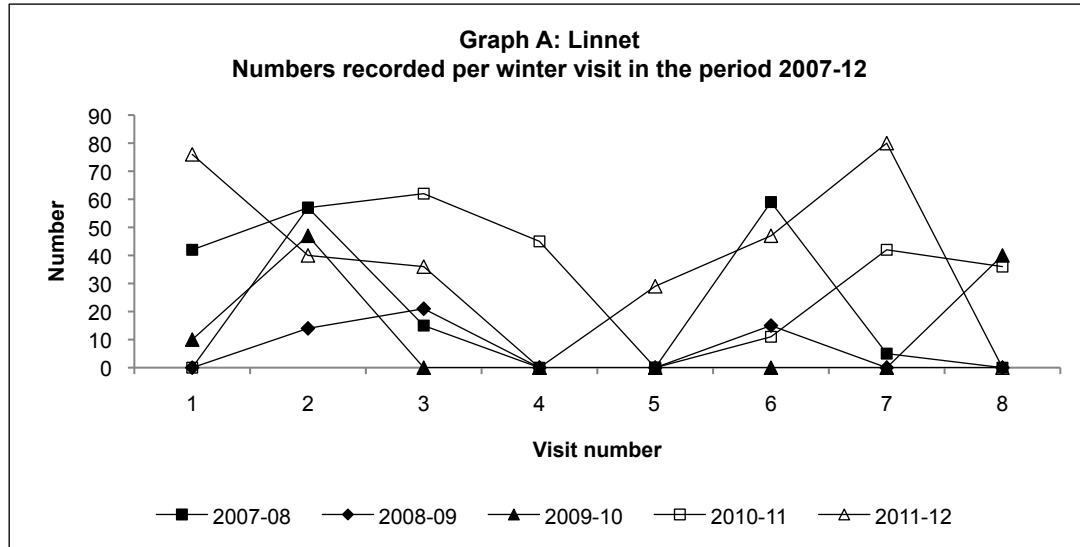


The general pattern of decline in the average annual number of Greenfinches recorded per winter visit appears to be real (as indicated in Graph B above). The effect of *Trichomonosis*, the viral disease that has spread erratically through the UK and particularly affecting Greenfinches, may well be relevant in this decline.

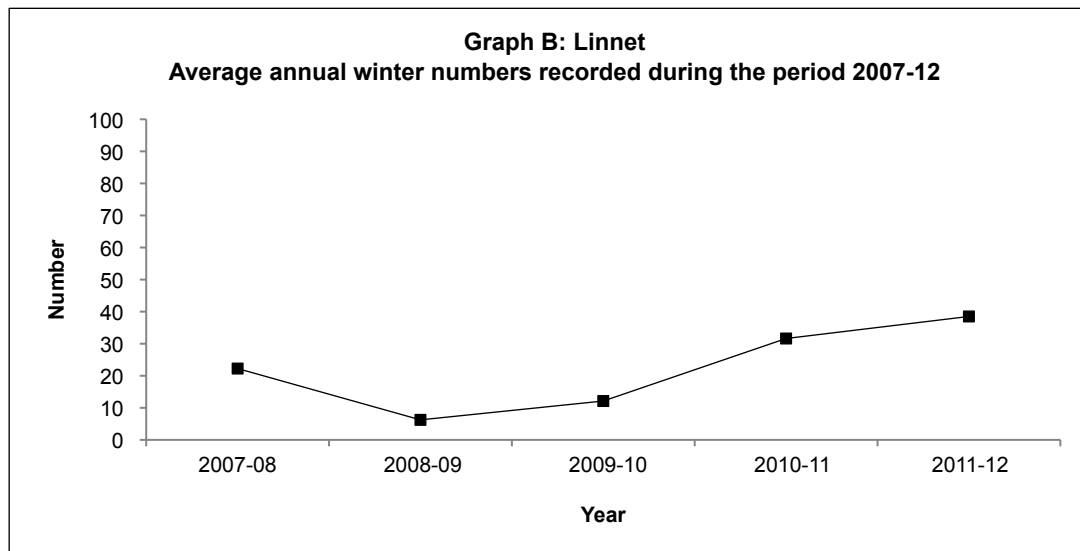
LINNET (Common Linnet) *Carduelis cannabina*
Common resident and passage migrant. Red List

Linnet numbers at Courtyard Farm are perhaps limited by the scarcity of bare earth available during winter on organic farms. When present, Linnets tend to be almost completely restricted to winter stubble and wild bird seed strips, with autumn sown vetch and *Phacelia* providing bare earth for a limited time only.

Wintering Linnets are almost invariably contained within single species flocks, hardly ever mixing with other finches and buntings, even though they may be feeding on the same food source.



Linnet flocks tend to be both volatile and rather nomadic, taking flight at the least disturbance, often splitting into smaller flocks and heading off in opposite directions. It is this behaviour that makes surveying and assessment of results difficult, as even though numbers recorded are erratic, it is often quite clear that ‘missing’ birds are feeding on adjacent land outside the survey area and are likely to return in the immediate future. This acknowledged, there does appear to be a loose pattern of increasing numbers occurring during autumn passage, peaking in early winter with a tendency towards departure in the most severe winter weather, before returning again in late winter and early spring.



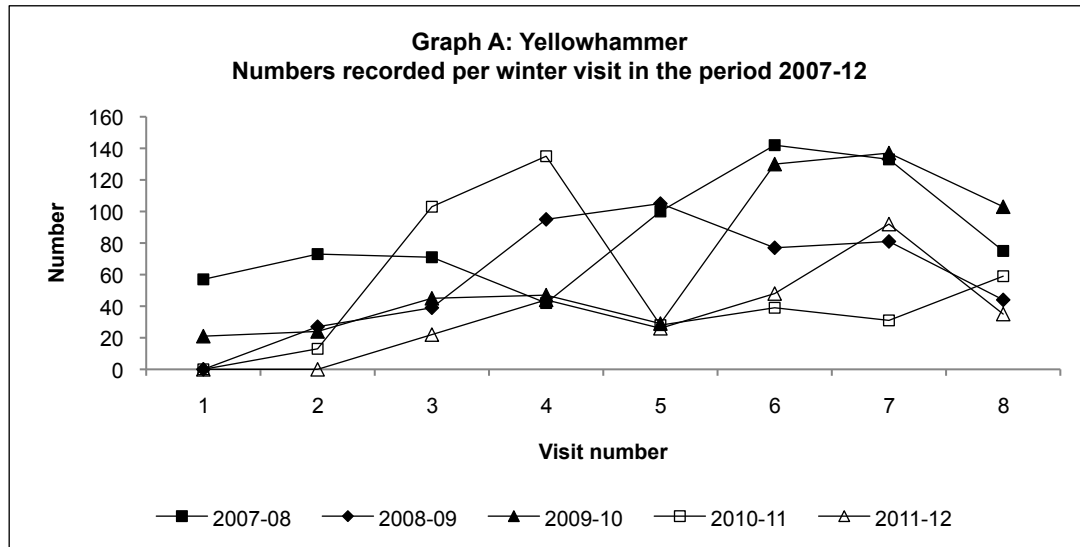
Although the annual average number of Linnets recorded per winter visit at Courtyard Farm is relatively low, there is an encouraging trend for increased numbers in the latter years following a particularly poor year in 2008-9 and 2009-10 when they were recorded on just three of eight visits in each of the survey periods. This increase in recording levels is clearly reflected in the data displayed above in Graph B.

YELLOWHAMMER *Emberiza citronella citrinella*

Common resident. Red List

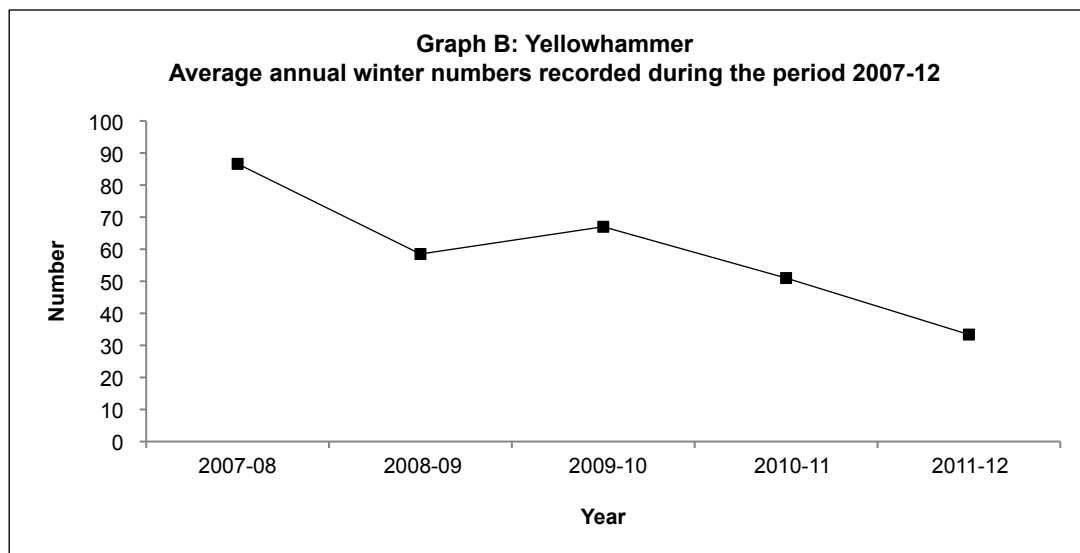
At Courtyard Farm the wild bird seed strips and winter stubbles (primarily first year and to a lesser degree second year under-sown) are clearly the favoured habitat of the vast majority of the wintering Yellowhammers. Small flocks, numbering up to low double-figures, can also be found in hedgerows and conservation headlands adjacent to drum feeders provided primarily for Grey Partridges.

In addition to the above, as with several other finches and buntings recorded on the farm, larger numbers can occasionally be seen in hedgerows adjacent to game cover strips on neighbouring land – these birds are not counted in the field survey work.



There is a good, and relatively stable, breeding population of Yellowhammers at Courtyard Farm but Graph A (above) shows a perhaps slightly surprising pattern of occurrence with increasing numbers of Yellowhammers being recorded through autumn and winter, peaking around late January before falling away again in late winter and early spring. The cause behind this is thought to be the prolonged good weather extending in autumn and early winter, delaying the formation winter flocks.

Only during the winter of 2010-11 was a major exodus noted in the hardest of the winter weather, with a small reduction numbers also noted during the winter of 2009-10.

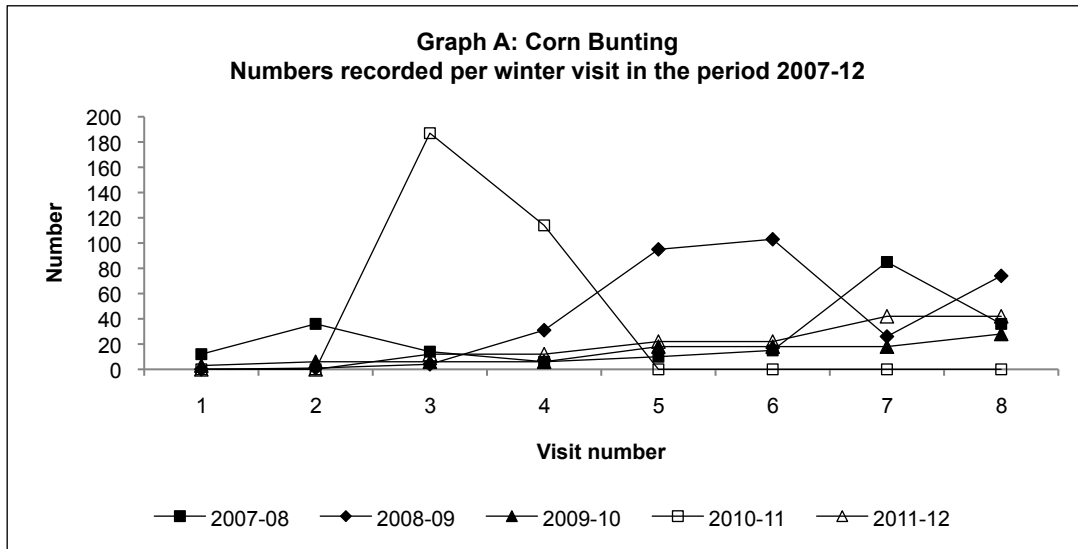


The low numbers of Yellowhammers present during the winter and early spring of 2010-11 (following periods of hard winter weather), and the generally poor year for the species during the full survey period in 2011-12 have given the indication of quite sharply declining annual average numbers of birds recorded per winter visit (as depicted in Graph B above).

CORN BUNTING *Emberiza calandra*
Scarce and declining resident. Red List

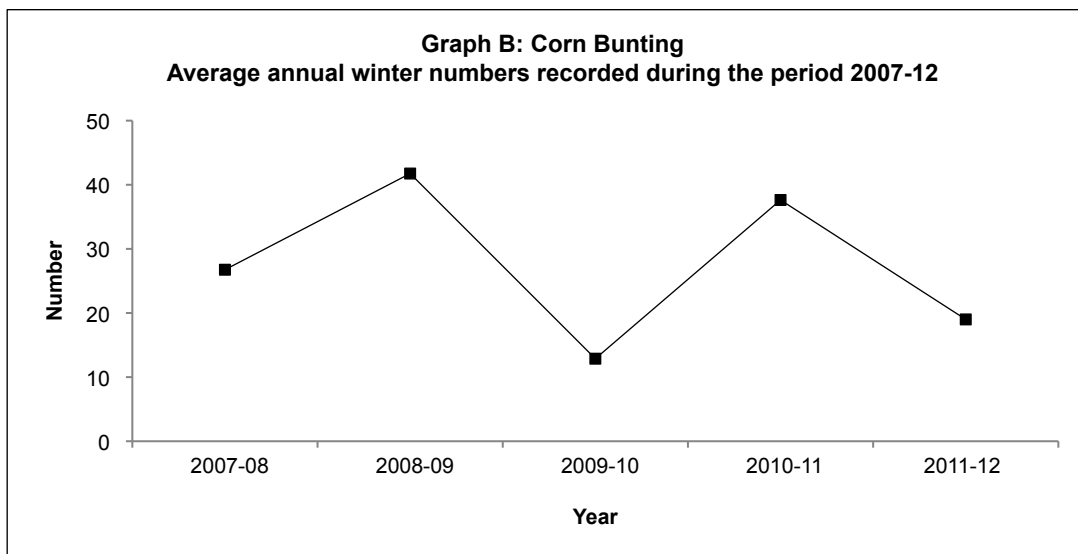
North-west Norfolk is one of the few areas of the county that still holds a breeding population of Corn Buntings, with Courtyard Farm itself having a small number of breeding pairs in most years. It is thought that the birds that winter at Courtyard Farm are from wholly local breeding stock.

Most often to be found associating with Skylarks, the range of habitat of Corn Buntings utilise at Courtyard Farm is very limited with birds only having been recorded in either winter stubble (primarily first year stubble, but to a much lesser degree second year stubble under-sown with clover, vetch or cereal rye), wild bird seed strips and stewardship grassland.



Graph A (above) shows Corn Buntings recorded per winter visit at Courtyard Farm to be somewhat variable both in timing of arrival, and in numbers. It is possible that prolonged spells of favourable autumn weather delay winter flocking in this species, thus creating the situation of building numbers after the turn of the year.

In some years numbers remain relatively small, for example 2009-10, and in others large influxes occur, as in 2010-11. The record count of 187 were recorded in early December 2010, of these 114 remained to late December before all dramatically departed at the onset of severe weather either side of the New Year.



The erratic nature of the appearance of Corn Buntings at Courtyard Farm in winter is clearly demonstrated by Graph B above. At present there is nothing to suggest that this situation will change in the immediate future.

Summary

A total of 25 species were fully recorded throughout the full survey period (all records noted) with 15 of those more intensively monitored (including very close observation to record habits and habitats utilised). The following summarises the trend of average annual numbers recorded per winter visit but the species texts will hold explanations (hard weather, poor autumn migration, etc.) for fluctuations in patterns of occurrence.

Of the 10 species fully recorded throughout the full survey period three showed an upward trend, namely: Red-legged Partridge (average annual number recorded per winter visit increased from 31 to 39), Curlew (average annual number recorded per winter visit increased from 25 to 31) and Common Gull (average annual number recorded per winter visit increased from 159 to 479).

A further two species of those fully recorded throughout the full survey period showed relatively stable trends, namely: Pheasant (average annual number recorded per winter visit increased from 33 to 34), and Magpie (average annual number recorded per winter visit decreased from 18 to 20).

A downward trend was noted in three further species that were fully recorded throughout the full survey period, namely: Lapwing (average annual number recorded per winter visit decreased from 46 to 17), Golden Plover (average annual number recorded per winter visit decreased from 56 to 7) and Black-headed Gull (average annual number recorded per winter visit decreased from 214 to 150).

A further two species that were recorded fully throughout the full survey period showed trends that were difficult to fully evaluate. Both Fieldfare and Redwing showed very erratic numbers during the survey period with average numbers of Fieldfares recorded per winter visit increasing from 84 to 114 (but fluctuating widely between 12 and 157), and numbers of Redwing recorded per winter visit increasing from 48 to 108 (but fluctuating widely between 5 and 108 with those numbers recorded in consecutive years).

Of the 15 species more intensively monitored a total of four showed an upward trend in the numbers recorded: Grey Partridge (average annual number recorded per winter visit increased from 9 to 29), Stock Dove (average annual number recorded per winter visit increased from 33 to 89), Jackdaw (average annual number recorded per winter visit increased from 81 to 156) and Linnet (average annual number recorded per winter visit increased from 22 to 39).

A further two species that were intensively monitored showed a relatively stable trend in numbers, namely: Woodpigeon (average annual number recorded per winter visit increased from 479 to 490) and Rook (average annual number recorded per winter visit increased from 6 to 7).

A total of seven of the more intensively monitored species showed a downwards trend, namely: Collared Dove (average annual numbers recorded per winter visit decreased from 36 to 10); Starling (average annual numbers recorded per winter visit decreased from 414 to 249), Tree Sparrow (average annual numbers recorded per winter visit decreased from 17 to 6), Meadow Pipit (annual numbers recorded per winter visit decreased from 60 to 29), Chaffinch (average annual numbers recorded per winter visit decreased from 95 to 73), Greenfinch (average annual numbers recorded per winter visit decreased from 38 to 10) and Yellowhammer (average annual numbers recorded per winter visit decreased from 87 to 33).

Finally, two further species that were intensively monitored, namely Skylark and Corn Bunting, showed trends that were difficult to evaluate at present, showing some confusing factors. Average annual Skylark numbers recorded per winter visit decreased gradually from 88 to 77 in the years 2007-8 to 2010-11, before a dramatic increase in numbers recorded in 2011-12, when an average of 178 were recorded per winter visit with exceptional numbers present throughout the survey period. Further research will be required to determine whether this increase will be maintained. Average annual numbers of Corn Bunting recorded per winter visit have declined from 27 to 19 between 2007-8 and 2011-12, but have fluctuated more extensively between 13 and 42.

The recorded relationships between the 25 species of birds that were recorded fully on all visits during the survey period and the available habitats, including crops (used for foraging, loafing, etc.), produced some expected results (such as Skylarks and stubble, Woodpigeons and clover, etc.) but also highlighted issues such as the lack of bare earth on organic farms during winter which is apparently detrimental to such species as Lapwing and Golden Plover, and the apparent unattractiveness to birds of *Phacelia*, an autumn-sown nitrogen holding crop.

The following section lists all individual habitats (excluding woodland) and highlights the relationship between that habitat and the recorded bird species within. The bird species listed are all from those 25 species monitored by recording all numbers each visit. Each individual habitat is followed by a list of those species in roman type that utilised the habitat most frequently and in the largest numbers, whilst those species in italics were recorded less regularly in that habitat, but still in numbers considered to be significant. The absence of any individual species from a particular habitat is

not an indication that the species does not occur in that habitat, merely that it occurs irregularly and sparsely or in insignificant numbers.

Buildings (Barns, stables, machinery sheds, farmhouse and cottages, plus associated gardens and bird feeders): Collared Dove, Woodpigeon, Tree Sparrow, Chaffinch, Greenfinch.

Permanent Stewardship Grassland (Open grazing land, larger conservation headlands and permanent horse paddocks): Red-legged Partridge, Grey Partridge, Pheasant, Curlew, Black-headed Gull, Common Gull, Stock Dove, Woodpigeon, Jackdaw, *Rook*, Skylark, Fieldfare, Redwing, *Magpie*, *Meadow Pipit*. Also recorded only on short-grazed stewardship grassland: *Starling*, *Linnet* and *Corn Bunting*.

Phacelia: *Lapwing*, *Golden Plover*, *Curlew*, *Black-headed Gull*, *Common Gull* and *Linnet*, all recorded only on the bare earth of newly sown field before plants grow and spread.

Vetch: *Lapwing*, *Golden Plover*, *Curlew*, *Stock Dove*, *Woodpigeon*, *Meadow Pipit*. Also recorded, mainly on the bare earth of newly sown field before plants grow and spread: *Black-headed Gull*, *Common Gull* and *Linnet*.

Phacelia/Vetch mix: *Meadow Pipit*. Also recorded, mainly on the bare earth of newly sown field before plants grow and spread: *Lapwing*, *Golden Plover*, *Curlew*, *Stock Dove*, *Woodpigeon*, *Black-headed Gull*, *Common Gull* and *Linnet*.

Trefoil: *Lapwing*, *Golden Plover*, *Curlew*, *Stock Dove*, *Woodpigeon*, *Meadow Pipit*. Also recorded, mainly on the bare earth of newly sown field before plants grow and spread: *Black-headed Gull*, *Common Gull* and *Linnet*.

Cereal Rye/Mustard mix: Red-legged Partridge, Grey Partridge, Pheasant, Curlew, Black-headed Gull, Common Gull, *Stock Dove*, *Woodpigeon*, *Skylark*, *Starling*, *Meadow Pipit*, *Linnet*.

Red/White Clover: Red-legged Partridge, Grey Partridge, *Pheasant*, Curlew, Stock Dove, Woodpigeon, Skylark, Meadow Pipit. Once cut for silage or grazed by livestock both Jackdaw and Magpie can be added to the list.

First-year cereal stubble: Red-legged Partridge, Grey Partridge, Pheasant, *Lapwing*, *Golden Plover*, Curlew, *Black-headed Gull* (loafing only), *Common Gull* (loafing only), Stock Dove, Woodpigeon, *Jackdaw*, Skylark, *Starling*, Tree Sparrow, *Meadow Pipit*, Chaffinch, Greenfinch, Linnet, Yellowhammer, Corn Bunting.

Second-year cereal stubble (under-sown Red/White Clover): Red-legged Partridge, Grey Partridge, Pheasant, *Lapwing*, *Curlew*, *Black-headed Gull* (loafing only), *Common Gull* (loafing only), Stock Dove, Woodpigeon, Skylark, *Starling*, *Tree Sparrow*, Meadow Pipit, *Chaffinch*, *Greenfinch*, *Linnet*, *Yellowhammer*, *Corn Bunting*.

Second-year cereal stubble (under-sown with other mixes, e.g. cereal Rye, Mustard, Trefoil): Red-legged Partridge, Grey Partridge, Pheasant, *Lapwing*, *Curlew*, *Black-headed Gull* (loafing only), *Common Gull* (loafing only), *Stock Dove*, *Woodpigeon*, *Skylark*, *Starling*, *Tree Sparrow*, *Meadow Pipit*, *Linnet*, *Yellowhammer*.

Wild bird seedstrips: Red-legged Partridge, Grey Partridge, *Pheasant*, Stock Dove, Woodpigeon, Skylark, Tree Sparrow, Meadow Pipit, Chaffinch, Greenfinch, Linnet, Yellowhammer, Corn Bunting.

Woodland edge, hedgerows (including suspended and drum feeders) and orchard: *Red-legged Partridge*, *Grey Partridge*, Pheasant, Fieldfare (autumn only), Redwing, Chaffinch, Greenfinch, Yellowhammer.

Common land and associated scrub: Red-legged Partridge, Grey Partridge, Pheasant, Woodpigeon (loafing only), Fieldfare, Redwing, Magpie, *Tree Sparrow*, Chaffinch, Greenfinch, *Linnet*, Yellowhammer.

Livestock enclosures (open land surrounded by electric fences): *Red-legged Partridge*, Black-headed Gull, Common Gull, *Stock Dove*, *Woodpigeon*, Jackdaw, *Magpie*, *Starling*, *Chaffinch*.

Other (e.g. fallow for weed control): Red-legged Partridge, *Grey Partridge*, Pheasant, *Lapwing*, *Golden Plover*, Curlew, *Stock Dove*, *Woodpigeon*, Skylark, Tree Sparrow, Meadow Pipit, *Chaffinch*, *Greenfinch*, *Linnet*, *Yellowhammer*, *Corn Bunting*.

Conclusion

Courtyard Farm is a small, organically farmed oasis enclosed within intensively farmed, conventional arable land that is heavily kept for game-shooting purposes. It is therefore inevitable that farming and sporting practices on adjacent land will have an effect on the wildlife of Courtyard Farm itself. The release of both Red-legged Partridge and Pheasant on the shooting farms clearly goes some way to boosting wintering numbers at Courtyard Farm; whilst the planting of winter game cover strips on

immediately adjacent land can also pull in large numbers of finches and buntings that will inevitably cross the boundary onto Courtyard Farm.

It is clear that the number of certain bird species recorded at Courtyard Farm is dependent on incoming autumn migrants that may (or may not) remain to over-winter at Courtyard Farm. Examples of this phenomenon are Woodcock, Fieldfare and Redwing, and to a lesser degree, Chaffinch, Goldfinch, Greenfinch and Reed Bunting. Furthermore hard weather (snow cover, frozen ground, a run of very low daytime and overnight temperatures) over the winter period can also cause a temporary or even permanent evacuation of the locality by several species. Again Fieldfare and Redwing are susceptible to this, as are Curlew and many smaller ground-feeding species such as Skylark, Tree Sparrow, Chaffinch, Greenfinch and Corn Bunting.

During periods of hard weather there is no doubt that many bird species present benefit from the constant food source available in the drum feeders and the suspended feeders. Drum feeders are most often visited by Red-legged and Grey Partridges, Pheasant, Tree Sparrow, Chaffinch and Yellowhammer. The suspended feeders are frequented by, amongst others, Tree Sparrow, Chaffinch, Greenfinch, and Collared Dove (on spilt grain below).

The presence of livestock at Courtyard Farm is important for a number of wintering bird species. Grazing cattle in autumn produce ideal foraging conditions for local and arriving migrant Starlings and Jackdaws alike. Indeed, Starlings would almost certainly be virtually absent at Courtyard Farm if it were not for the presence of livestock as they move to the pig enclosures once the cattle go inside for the winter. The pig enclosures (and associated hopper feed) also provide winter foraging for Black-headed and Common Gulls and small numbers of Pied Wagtails.

As referred to previously, the absence of bare earth on organic farms over the winter period due to the autumn-sowing of nitrogen holding and replacement crops precludes the presence of large numbers of Lapwing, Golden Plover and Rook, all of which are present on adjacent land in good numbers. Displacement to Courtyard Farm does occur in both Lapwing and Golden Plover, but Rook remains a surprisingly scarce bird on the farm and is only really ever recorded on the bare earth of autumn-sown crops and spring plough. Unfortunately, *Phacelia*, one of the best autumn-sown nitrogen holding crops, appears to be very unattractive to most bird species apart from when the seedlings are small (i.e. a high percentage of bare earth on the surface). Other options such as Trefoil and Mustard have been tried with some success and more recently the growing of autumn-sown Vetch for seed production has limited the acreage of *Phacelia* and is particularly favoured by over-wintering Meadow Pipits. More alternatives to *Phacelia* are to be tested in 2012-13.

Cereal stubbles are also very important to a number of species that over-winter at Courtyard Farm. First-year stubbles (stubbles left after autumn harvesting) are particularly favoured by such important species as Grey Partridge, Skylark, Tree Sparrow, Yellowhammer and Corn Bunting. What is perhaps a little more surprising is that second-year stubbles, that is stubbles standing into the second winter having been under-sown with various other crops such as Red and White Clover (for nitrogen fixation in the soil) are also utilised by the same species, albeit to a lesser degree.

Finally, whilst it is obviously not easy to reflect in the presented results, it is all too often apparent during the field survey work that the diversity of habitats and species (of all orders) recorded at Courtyard Farm during the full survey period is far in excess of those noted on the adjacent land that is farmed both conventionally and intensively.

Acknowledgements

Thanks are due to Lord Peter Melchett, who once again allowed unrestricted access to his land and provided encouragement and support. I also thank my personal friends and erstwhile colleagues, without whom this report would not be possible in its current format.

