

OPERATION HUNGRY GAP



RESULTS OF THE 2015 FARMLAND FEEDING STATIONS







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Photos by Romano da Costa and Cristina Sellarés de Pedro.

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SUMMARY

Following the trial of a supplementary feeding station at a farmland conservation site in the winter o f 2013/14, a further supplementary feeding programme was carried out at four locations over the 2014/15 winter. The feeding stations were located within Birds On The Edge conservation sites, where winter bird crops had been planted, and followed recommendations featured in each site's management plan. The aim of this operation was to provide a source of food for farmland birds such as linnet, skylark, reed bunting and chaffinch at a time when there were few resources left in their farmland habitats, even more so after the conservation fields were planted with potatoes. Two sites were started at the same time and a further two were added to the operation later, as trials. On average 40kg of wheat and broken maize were put down during each feed, with the feeding spot being swapped regularly to avoid build-up of food and attracting pests. Bird abundance and utilization of the feeding site was measured with data from the BOTE Winter Farmland Bird Surveys. Bird numbers appeared to increase after feeds had started at most sites; however, they decreased significantly after the fields were flailed. The reasons for this which are discussed include start of b i r d migration, poor design of the feeding station, and late start of the feeds. This operation increased our practical experience on the management of such operations and a reassessment of what was discovered during the trial period.

I. INTRODUCTION

Birds On The Edge (BOTE) is a partnership between Durrell Wildlife Conservation Trust, States of Jersey Department of the Environment and the National Trust for Jersey that aims to restore habitats and to stop the decline of locally endangered birds.

It is evident that farmland birds are suffering the steepest decline of all birds across Europe and the UK¹. This trend is mirrored in Jersey, where one out of every three endangered birds is a farmland bird². It has been determined that the main cause of their decline is the reduction in winter survival, as traditional sources of food have declined in modern farmland³.

Traditional farms in winter would provide feeding opportunities for birds in the form of spilt cereal, fields left in stubble and fallow grounds. In Jersey it is not known what changes in farming have had the most impact on local birds, but it is believed that a combination of intensification and modern technologies have contributed to the declines.

The lack of winter food has been addressed in various countries with the help of European Union's agri-environment schemes (AESs) as management tools, which in the UK are fulfilled via the Environmental Stewardship (ES) scheme⁴. The two main strategies to deliver food in winter are:

- a) Indirectly: The food is found in fields left in stubble or at fields planted with specialist high energy, seed bearing crops known as Winter Bird Crops (WBC)^{5,6}.
- b) Directly: The food is supplied at large-scale feeding stations^{7,8}.

In Jersey BOTE is tackling the decline of local farmland birds such as the skylark, reed bunting, yellowhammer, cirl bunting and linnet, by working with farmers to implement winter bird crops⁹. The sites were chosen for their key features for wildlife and the scheme grew from one site in 2012 to ten in 2014. The first two years of data from the winter crops indicate that most of the sites have a positive effect on bird populations, and suggest an increase in bird numbers at the crops from one winter to the next¹⁰.

The particular nature of Jersey's early potato industry means that most of the fields with WBCs are ploughed and planted before the end of the winter and as early as December. With the bird crops gone and most fields under polythene, there is little if no food left for the birds in the farmland at the most critical and coldest time of the year.

A solution to fill this, so-called, 'hungry gap' was tested in Jersey with a feeding station at one of the six WBC sites in 2014¹¹. The station was set up at a WBC site and ran from January until April, delivering between 20-80kg of bird food per week. The results of this trial were not conclusive although the numbers of birds present at the site peaked twice during the trial period. The decrease in numbers towards the end of March could have been linked to the start of spring migration for the wintering birds and the emerging or alternative sources of food, such as invertebrates. In 2015, the main aims of Operation Hungry Gap were:

- To offer a source of food high in energy and nutrients at a time where other food sources are depleted.

- To cater to the highest number of farmland bird species, taking into account a wide range of beak sizes and feeding strategies.

- To be implemented in a way that minimizes the energy expenditure of the birds and the risk of predation, pests and diseases.

c) METHODOLOGY

Feeding stations were set up at four conservation sites that had been planted with winter bird crops. In the winter of 2014-2015 there were a total of 10 conservation sites with such crops across Jersey. The sites chosen for supplementary feeding were Sorel (St John), Crabbé (St Mary), Les Landes (St Ouen) and St Ouen's Pond (St Ouen/St Peter).

Between 29th January and 26th March 2015 a total of 25 loads of 40kg of food (20kg of whole wheat + 20kg of mixed corn) were put out at the feeding stations, except for the two initial feeds which were only 20kg (**Table 1**). The delivery was carried out between 0900h and 1300h, always on dry days or during dry intervals in the weather. The delivery rate was usually once or twice per week, depending on the site, weather and birds present.

The food was not always put down on the same spot. The feeding area was alternated or shifted within the site from one feed to the next, to avoid buildup of seed and the attraction of non-target species such as rodents and opportunistic birds such as crows and pheasants. At some sites, where there were houses or buildings adjacent to the fields, the food was put down at the furthest point from the buildings.

Bird presence at each site was recorded during 10-minute counts before each feed. Research conducted by the BTO (G. Siriwardena, *pers. comm.*) and our own results from the 2014 trial suggest that watches immediately after a feed were not representative of the average uptake by birds at the site, and that this would be better reflected in standardized surveys such as the Winter Bird Farmland Surveys. The main body of research used for this report is, therefore, the data collected on the Winter Farmland Bird Surveys, carried out by Birds On The Edge every fortnight at the winter b i r d crops sites. Wild and feral mammals, if present, were also recorded.

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Picture Delivery of the bird food

d) TIMELINE

Despite plans to start feeds in November or December 2014, funding for the food was not obtained until the third week of January, when a private donor came forward to cover the costs. From that point, the food was ordered and feeds were started at three sites within the same week. A month later a fourth site was added to the operation and feeds began there as well. As birds disappeared from the sites, feeds were reduced and stopped, with two bags left unused the end of the operation which were stored for the following year.

Date:					
23/1/15	Private donor offers £400 to cover the cost of the seed food.				
26/1/15	Seed food ordered: 50 bags of 20kg (25 bags of whole wheat and 25 bags of mixed corn). Two bags of each were available to take to start feeds.				
29/1/15	First feeds at Crabbé and Sorel.				
30/1/15	First feed at Pond.				
3/2/2015	Rest of delivery arrives.				
27/2/15	First feed at Les Landes.				
23/2/15	Last feed at Pond.				
12/3/15	Las feed at Crabbé.				
19/3/15	Last feed at Les Landes.				
26/3/15	Last feed at Sorel.				

Table 1 Breakdown of feeds at each site

Date	Site	Whole	Corn mix	Date	Site	Whole	Corn
		wheat (kg)	(kg)			wheat	mix
						(kg)	(kg)
29/01/2015	Crabbé	20	-	23/02/2015	Pond	20	20
29/01/2015	Sorel	-	20	27/02/2015	Crabbe	20	20
30/01/2015	Pond	20	20	27/02/2015	Sorel	20	20
03/02/2015	Crabbé	20	20	27/02/2015	Les Landes	20	20
03/02/2015	Sorel	20	20	02/03/2015	Les Landes	20	20
10/02/2015	Crabbé	20	20	05/03/2015	Crabbe	20	20
10/02/2015	Sorel	20	20	05/03/2015	Sorel	20	20
13/02/2015	Pond	20	20	12/03/2015	Crabbe	20	20
17/02/2015	Sorel	20	20	12/03/2015	Sorel	20	20
17/02/2015	Crabbé	20	20	12/03/2015	Les Landes	20	20
17/02/2015	Pond	20	20	19/03/2015	Les Landes	20	20
23/02/2015	Crabbé	20	20	26/03/2015	Sorel	20	20
23/02/2015	Sorel	20	20				
23/02/2015	Pond	20	20				

e) **RESULTS PER SITE**

1. SOREL

Description of site and management

This area was the site of the 2014 feeding station trial. It is where the winter bird crops scheme started in 2011 and most of this land has supportive land owners and farmers who manage a combination of early potato crops, winter bird crops, permanent invertebrate fields (fallow at present) and a proportion of land in cereal stubble. This area has good quality hedges in some sectors, as well as coastal heathland, gorse, and coastal grassland grazed by a conservation flock of sheep. It is home to breeding pairs of meadow pipit, chaffinch, goldfinch, common whitethroat and Dartford warbler, and a migrating stop over or wintering retreat to many linnet, stonechat, whinchat, song thrush, fieldfare, common starling, skylark, ring ouzel, wryneck and wheatear amongst others.

This feeding station was managed from the last week of January until the last week of March. The placement of the station varied slightly from the previous year, and it was regularly alternated between four different areas (**Map 1**). A new area was tried in the north-east corner by a set of winter bird crops that were planted for the first time this year and which had tall and thick hedges.



Map 1 Feeding station at Sorel conservation site.

Results

The uptake of the feeding stations could not be directly observed, although during feeds many birds were observed in the hedges and trees nearby, and small droppings were found at the feeding sites days after each feed. The main body of data comes from the Winter Farmland Bird Survey, carried out at each site every fortnight.

The WFBS carried out at Sorel showed fluctuating numbers of birds as groups of migrants passed the area throughout the winter, local breeders moved south, juveniles dispersed, and wintering birds arrived to settle. The spike on 20th November is due to an unusually large group of starlings (*circa* 450) that was counted on that survey.

The most prominent farmland species were chaffinch and meadow pipit, with linnet increasing significantly in numbers after 31st December, and even more towards the end of the supplementary feeding period. Overall it would seem that numbers reacted positively to the start of the feeding operation, taking the net count to this winters' surveys to its maximum count, and followed by the second highest count as well on the following survey. After increasing, the flock of linnets remained stable at 200-250 birds until the second week of March. Chaffinch numbers seemed more stable at 20-50 birds throughout the early winter, later increasing at the same time as the linnets, and reached its highest number (450 birds) straight after the beginning of the supplementaryfeeding.

Other species that were found at the site during the winter might have also benefitted from the feeding station. These include the large flock of starling as well as stock dove, song thrush and reed bunting, whose presence increased from the previous winter by five records to one.



Figure 1 Bird numbers throughout the winter and feeds carried out at the site.

There were a few logistic challenges while managing the feeding stations at this site. The food was put down at the field edges and close to trees or hedges, but access to the site was limited to areas that could be reached without a four-wheel drive vehicle. The ground was dry and clear of obstacles or vegetation for most of the period but became unsuitable after rain, when it was wet and muddy. After the fields were ploughed and planted there was very little space left to put down the food.

Picture The feeding site during the winter.



Conclusions and recommendations

This feeding station performed positively, and obtained better results than during the previous year's feeding operation. Compared to the year, more linnets and chaffinch were observed, the maximum number of birds recorded was higher, and there were higher numbers of birds for a longer period of time. This general increase in numbers and positive correlation between feeds and n u m b e r s might not be completely linked to the feeding operation; other variables, unknown at this time, might be playing a part in these observations. Logistic constraints meant that the management of this feeding station was dependent on the weather and the quality of the vehicle. When the potatoes were planted most feeding areas were ploughed and planted, restricting considerably the choice of sites to put food down.

This is an important area for breeding and wintering birds, and the continuation of a winter feeding station at the site is strongly recommended. However, the following would be advisable:

- To habilitate a purpose-built feeding track or tracks at the site, so that the feeding operation would not depend on weather, vehicular access or the management of the potato fields.
 This track should not affect the value of the field and its commercial crop.
- To start the feeds earlier, towards November or December, and to keep them at a rate of once or twice per week.

2. CRABBÉ

Site description and management

This site was chosen for the high numbers of birds observed in the winter bird crops since they were planted first in 2013. The three fields attract hundreds of birds which feed on the crops from October until the potatoes are planted. This area has one line of tall and dense trees where birds p e r c h and shelter between feeds. The rest of the adjacent land has few good hedges and most of the fields are used for potatoes or silage crops.

The decision to start a farmland feeding operation at this site was taken in December 2014 after surveys revealed that high numbers of birds were again using the winter crops.

This feeding station was managed from the last week of January until the third week of March. The station was placed along an existing track by the edge of a field (**Map 2**). This wide, empty track is occasionally used by walkers and farmers, and provides a good place to put the food down. Unfortunately the hedge along the track is in poor state and comprised of scattered clumps of hawthorn.



Map 2 Feeding station at Crabbé conservation site.

<u>Results</u>

The winter bird crops proved very popular at this site, with the highest count of greenfinch across all the sites (250 birds). Linnet numbers started to increase towards the end of October and remained stable until second week of December, after the feeds had started. Total numbers surpassed the 1,000 bird-mark twice, in mid-November and again in early December, caused by large flocks of starlings found in the area. However, starlings were not present at any of the surveys after that.

Other birds of interest in the area were skylarks, with a survey maximum of 22 birds, as well as many stonechats (seven in one day) and reed buntings (with a maximum of 10 and a regular presence in the surveys). There were frequent sightings of bramblings, and rare visitors such as little bunting and serin were also observed.

Pictures Reed bunting (top left), brambling (top right), serin (bottom left), little bunting (bottom right).



The chaffinch is the only species that appeared to increase immediately after the feeds had started. Numbers had remained stable between 200-400 birds, until a peak on 9th February, after the first two feeds. Right after that the fields were ploughed, and by the time the next survey was carried out, on 24th February, the chaffinch and other species had declined to their lowest point.

Access to the track was limited to four-wheel drive vehicles, so most of the feeds were done by hand from the car which was parked near the field's entrance. The track was also used by farmers and dog walkers, and it remained suitable for feeds most of the time. However, the track was ploughed alongside its field and planted with potatoes all the way up to the boundary, so putting down the food became difficult and it is believed that much seed was unnecessarily wasted in the process.



Figure 2 Bird numbers throughout the winter and feeds carried out at the site.

Conclusions and recommendations

This feeding site was placed within very successful conservation crops; however, the numbers of b i r d s did not remain high after the fields were ploughed. This could be due to at least one or both of the following factors:

- a) The bird's main source of food being the crops, which were ploughed.
- b) The difficulty to manage the feeding site after the fields were ploughed, making finding the food difficult for the birds.
- c) The start of spring migration, with many birds leaving for their breeding grounds.

Also, the linnets had already declined by the second week of December, meaning that the supplementary feeding, which started at the end of January, did not benefit them.

The station has the potential to reach higher numbers of birds, especially if the following issues are considered:

- To start the feeds earlier, around November of December, and to carry them out at a frequency of one or two per week.
- To create or habilitate a track or other access for the duration of the feeding operation.

Site description and present management

This conservation site (Skinner's fields) was one of the smallest of 2014, the first year it was planted with winter bird crops (**Map 3**). The site is close to Les Landes, an area of conservation work priority for Birds On The Edge, as it comprises the extensive Les Landes SSI with heathland and maritime grassland, as well as many areas of scrub, small wet meadow and woodland, and agricultural land set aside for conservation known as 'Skinner's fields'.



Picture Skinner's fields conservation land near Les Landes.

As winter progressed it was observed during the surveys that birds were using the crop in large numbers and it was decided to try a feeding station towards the end of the operation. Food was put down at the western end of the main field, which was wide and dry for the first few weeks of the winter. However, as it was close to a pond and on lower ground, it became wet and muddy, and so the feeding site was moved to the sides of the field. Four feeds were put down in total, mainly during the last week of February and the third week of March.

Map 3 Feeding station at Les Landes.



Results

The winter bird crops at this site attracted an interesting variety of farmland birds, the most abundant being chaffinch, and to a lesser extent but in regular frequency greenfinch, meadow pipit, skylark, goldfinch, song thrush and jackdaw. A small flock of linnets, of between 23 and 75 individuals, was observed in four occasions. Reed buntings were observed in smaller numbers (the maximum was 25) but with a much more regular presence. Bramblings were also observed regularly at this site, with as many as three in some counts.

Picture A male reed bunting trapped at Les Landes, which was previously trapped in the reedbeds of St Ouen's Pond and also at the winter bird crops by the pond.



Chaffinches took up a high proportion of the totals of each survey, and began to increase towards t h e end of December. The overall total was highest on 24th Feb; this was due to a flock of 180 stock doves, with their highest count of the winter. If that number were removed from the totals, the two maximums reached by farmland birds (and mainly chaffinch), were found shortly after the start of the feeding operation. In contrast, both fields were flailed on 11th March and bird numbers dropped dramatically after that.



Figure 3 Bird numbers throughout the winter and feeds carried out at the site.

Please note that the number bars in this graph are not spatially distributed in representation of real time, as surveys were intensified to daily frequency from the 5March till 12th March.

Conclusions and recommendations

The winter bird crops at this site performed better than might have been expected, attracting higher numbers of farmland birds than other sites of similar size. The chaffinches seemed to respond to the start of the feeds; however, most birds disappeared shortly after the fields were flailed, and t h e last two feeds did not seem to keep the birds in the area.

It is recommended that this feeding station runs again in 2016, if the bird crops are planted, as high numbers of birds are expected to return to the crops. However, it is recommended that the following issues are considered:

- To start the feeds earlier, no later than December, and to carry them out at regular intervals (once or twice per week would be ideal).
- To leave the feeding areas unploughed and unplanted until the feeding operation is over.

Photo The feeding site after the winter bird crops were removed.



4. POND

This was another new conservation site for the winter of 2014-2015, with a large area of fields planted with winter bird crops (**Map 4**). It was chosen for its proximity to the reedbeds around St Ouen's Pond and the grazed pastures, wader scrape, grassland, willow copse and areas of scrub, all of high value for birds and other wildlife.

It was decided to trial a few feeds at this site when high numbers of farmland birds were observed regularly on the surveys, and it was realized that it was going to be ploughed relatively early – by the first week of February.

The food was put down at the north-west corner of the area, as far from the houses as possible. A total of four feeds were carried out, on the last week of January, and the 2nd, 3rd and 4th weeks of February.



Picture The winter bird crops near St Ouen's Pond.





<u>Results</u>

This site yielded some expected, yet very positive results, with the highest numbers of reed buntings and linnets observed across the Island during the winter. This was the only site in Jersey where linnets, reed buntings and goldfinch were more abundant than chaffinch in most of the surveys. Skylark, meadow pipit, stonechat and starling were also found regularly and in good numbers when compared to other s it es. The area was popular with carrion crows and feral greylag geese. Neither species was seen feeding from the food that was put down.

A couple of bird-ringing sessions in the fields produced small numbers of chaffinch, linnet and reed bunting, with an interesting male reed bunting that was re-trapped at dusk in the Pond's reeds as well as at the Les Landes fields a week after the fields of this site were ploughed.

Whilst chaffinch numbers remained similar or sometimes below numbers of linnets or reed buntings, once the feeds had started chaffinch numbers climbed to their highest records in two consecutive surveys (at around 500 birds), with linnet decreasing and reed buntings increasing slightly. Most species disappeared in large numbers after the fields were ploughed, and subsequent feeds seemed to fail in attracting many birds back to the area.

Finding a suitable area to put the food down was difficult due to the lack of suitable hedges and tracks. The feeding site was ploughed alongside the rest of the field, making it even more difficult to find a spot where to put the food down.



Figure 4 Bird numbers throughout the winter and feeds carried out at the site.

Conclusions and recommendations

As a winter crop, this site had positive results in the form of high numbers of birds in the area and of species of conservation concern such as the reed bunting, skylark, linnet and starling. Unfortunately, this site was planted earlier than most and few birds were observed after the bird crops were ploughed. Some individuals might have moved onto other winter crop sites, such as the re-captured reed bunting found days later at Les Landes, whilst other might have started their migration back to the breeding grounds. It is also possible that some might have starved to death.

With the highest numbers of skylarks and reed buntings found at this site, which is also the closest t o their potential breeding grounds (scrub and sand dunes for skylark, reedbeds for reed bunting), it is believed that securing a source of food in this area throughout the year could increase their breeding output (or kick start a breeding population in the case of the reed bunting). Unfortunately, birds seemed to lack a tree line or hedge to rest and hide between feeds, as they were observed mostly sheltering in the crop itself; once the crops disappeared so did the birds, regardless of the food that was being put down.

It is recommended that the feeding operation is continued over the next winter, however considering the following issues:

- To find or create a suitable boundary of trees or a hedge of good quality, where birds can perch in large numbers and shelter between feeds, especially after the crops have been ploughed.
- To habilitate or create a dry track adjacent to the hedge or line of trees.
- To start the feeds earlier, around December, and to carry them out at a frequency of one or two per week.

f) FINAL CONCLUSIONS AND RECCOMMENDATIONS

1. CONCLUSIONS

The running of Operation Hungry Gap was at times improvised, much more so than during the trial in 2014. This was mainly due to the late sourcing of funds, which were only obtained on 23rd January.

The feeding operation started simultaneously at two sites, Sorel and Crabbé, which had a good record as winter bird crops for the previous two years. As the winter progressed it was decided to add two further sites, which had WBCs for the first time, and that were performing well at attracting large numbers of farmland birds. If the funding had been available earlier, the two first sites would have been started earlier too (most likely in November or early December), but the downside would have been that there would have been no seed left to start the two other sites.

The positive outcome of this year's operation was that all sites registered an increase of farmland birds for one or more weeks after the feeds had started. Whilst this research does not have the scope to discard other possible factors that might play a part in this observation, it is encouraging to see a correlation between the feeds and the increase of birds.

Unfortunately, large numbers of birds left the sites after the winter crops had been ploughed and planted with potatoes - not unlike the results from 2014's feeding operation. Whilst a well-designed, functioning feeding station should be able to provide to birds even after the fields are ploughed, it does not seem to be the case here. It appears that the birds' main source of food was the bird crops and that they failed to switch to the feeding stations in time to become reliant on them.

This could be due to the following issues:

- Timing: The feeds started later than was hoped during the last week of January (a week later than 2014) and ran for 8-12 weeks. This might not be enough time for some birds to get used to eating at the food sites.
- Food: Again a mixture of broken maize and whole wheat was used, which might exclude certain species of birds with specific needs regarding size, shape or certain nutrients.
- Quality of hedges: Areas with no hedges or hedges of poor quality had no cover for birds after the winter crops were flailed.
- Access: The location of feeding sites was limited by the vehicle that was used. Access to a four-wheel drive would have expanded options when selecting sites for the feeds.

The start of the spring migration might also have played a part in the bird numbers declining, as a high portion of birds at the winter crops are believed to be wintering rather than residents. Other factors, like the presence of predators or competitors (pheasants, rats, cats, feral ferrets), might have an effect on the use of the feeding stations. None were observed during the feeds, but some of them have nocturnal habits and, therefore, would be difficult to monitor.

Another issue that has not been properly resolved was finding a survey technique specially designed to monitor the birds' uptake at the feeding stations, a methodology involving direct observations that produces reliable results. Measuring birds directly after feeds is highly time-consuming and the data that it produces is not thought representative of the actual food uptake. This is because birds might not feed until hours have passed from the food drop, of might be prevented from doing so by bad weather or the presence of a predator. No research has been conducted to date based on direct counts, and UK researchers rely on standardized surveys such as the Winter Farmland Bird Survey (G. Siriwardena, *pers. comm.*), in a similar manner that used for this operation.

2. RECOMMENDATIONS

Based on what has been learnt during the 2015 feeding operation it is recommended that, in order to set up further feeding stations, the following improvements are made:

- 1- Facilitate a track for this purpose, within the conservation site, adjacent to a winter bird crop, free from plant growth and easy to keep dry, easily accessed, next to a hedge, away from any buildings, and long enough that can be divided into sections to rotate the feed sites.
- 2- If the hedge by the feeding track has gaps or there are few trees in it, restore it or plant a new one.
- 3- Start the feeds earlier, during November or early December at the latest. About one ton per site should cover a varying demand of 20-40kg per week between October and April. Adjust quantity of food based on how fast it is eaten and bird numbers change as winter progresses.
- 4- Try different types of seeds and grains as varied as possible, ranging in size from red and yellow millets to cut maize, and including sunflower, wheat and oat. Canary seed can also be used for bunting species such as the cirl bunting. In order to minimize energy expenditure and predation risk it is recommended that the food comes de-husked, such as naked oats and sunflower hearts.
- 5- Leave the winter crops in the fields as long as possible, ideally until the spring.
- 6- Gather further data by placing camera-traps at the feeding stations to monitor the bird species and numbers. A camera with night-time vision will also record the activities of nocturnal predators and pests.

These recommendations can be applied to any prospective site; however, it is strongly advised that, for the foreseeable future, Birds On The Edge concentrates on managing feeding stations at one or two sites only. The two sites proposed to continue are those at Sorel and the Pond, both on National Trust Land. By being on Trust land, BOTE will be able to facilitate the planning, creation and management of the feeding stations in a quick and effective way. If the stations are set up and managed as recommended, it is hoped that the results will improve significantly.

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Scientific and full common names of species

Greylag goose Common pheasant Stock dove Eurasian wryneck Western jackdaw Carrion crow Eurasian skylark Common whitethroat Dartford warbler Common starling Ring ouzel Fieldfare Song thrush Whinchat European stonechat Northern wheatear Meadow pipit Brambling Common chaffinch European greenfinch Common linnet European goldfinch European serin Yellowhammer Cirl bunting Little bunting Common reed bunting Anser anser Phasianus colchicus Columba oenas Jynx torquilla Corvus monedula Corvus corone Alauda arvensis Sylvia communis Sylvia undata Sturnus vulgaris Turdus torquatus Turdus pilaris Turdus philomelos Saxicola rubetra Saxicola rubicola Oenanthe oenanthe Anthus pratensis Fringilla montifringilla Fringilla coelebs Chloris chloris Linaria cannabina Carduelis carduelis Serinus serinus Emberiza citrinella Emberiza cirlus Emberiza pusilla Emberiza schoeniclus