

GBFS NEWS

SEPTEMBER 2020



Thank you for your contributions to the Garden Bird Feeding Survey; we remain extremely grateful for your valuable records. The schedule of the annual newsletters has unfortunately been disrupted due to staff changes, and changes in our ways of working due to COVID-19 restrictions, and we apologise for the delay in producing this issue. Please note that this issue refers to the results from winter 2018/19. Your valuable records from last winter are being analysed, and the 2019/20 newsletter will be sent to you as soon as possible.

Summary of 2018/19

The weather in early 2019 was in stark contrast to the previous year, with record high temperatures in February. Despite this, in winter 2018/19 we were still seeing possible impacts from 2018's 'beast from the east'. Many of the smaller garden birds, such as Dunnock, Robin and Wren were reported in smaller numbers at your bird feeders in 2018/19 than in the previous five winters. Not all birds fared poorly however,

with species such as Red Kite being reported from many more of your gardens than in previous years.

Early 2019 also saw the publication of Dr Kate Plummer's significant paper entitled 'The composition of British bird communities is associated with long-term garden bird feeding' which was based on GBFS data collected over the previous 40 years. This research demonstrated that British garden bird feeding has led to a much more diverse community of birds using our garden feeders; turn to page 8 for more information. We were delighted by the impact of the paper, with many major outlets, including Sky News, Channel 4 and National Geographic, reporting on the work.

If you have any interesting sightings or photographs from your gardens then we would love to see them. They can be sent to the BTO office or to gbw@bto.org.

Rob Jaques
Supporter Development Officer

GBFS review of winter 2018/19

Much of the UK experienced a mild winter with little ground frost, which ended with unusually high temperatures in February. The weather may have meant that usual garden visitors were less reliant on bird feeders, and their populations may also have been recovering from the extreme weather of early 2018.

Small birds absent

Many of the common small birds we expect to see over the winter months were seen in much lower numbers than we would usually expect for this time of year. We know from the BTO/JNCC/RSPB Breeding Bird Survey that breeding numbers of small-bodied birds, including Wrens, Dunnocks, Robins and Goldcrests, dropped in 2018, likely due to mortality caused by the 'Beast from the East', the extreme cold weather event in the spring of 2018. GBFS counts of these four

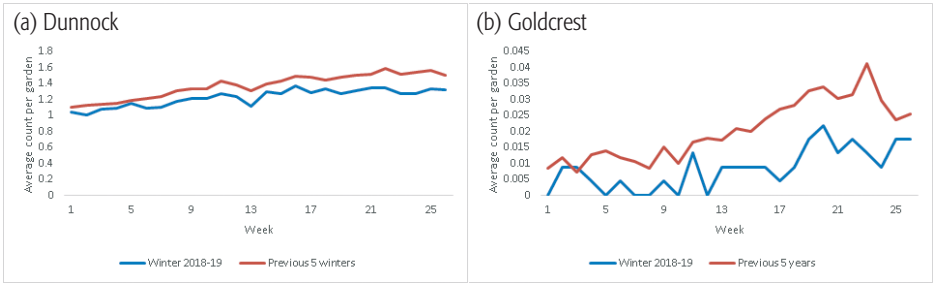


DUNNOCK, ALLAN DREWITT / BTO

species were particularly low in winter 2018/19, which may indicate that their numbers were still recovering from the severe weather of the previous winter.

For Goldcrest we can see several weeks where no birds were recorded in any GBFS gardens. While not a common visitor to feeders, they will take from fat balls and suet and we would expect them to be seen in a few gardens during most weeks. Some of the Goldcrests wintering in our gardens are

Garden Bird Feeding Survey average peak count per garden for winter 2018/19 for (a) Dunnock, (b) Goldcrest, (c) Song Thrush, and (d) Stock Dove.



winter visitors from Scandinavia, and warm weather in northern Europe means that fewer will make the risky journey across the North Sea; this may have played a part in the low numbers seen in 2018/19.

Short supply of worms

Song Thrushes left garden feeding stations from February onward, coinciding with the hot dry weather. During the mild weather, several species, such as Blackbird and Robin, began to be recorded less in gardens. In February temperatures are normally cold and natural food supplies low, driving birds to use our feeders. However, in February 2019 the very mild conditions may have meant birds such as Song Thrushes were able to forage elsewhere, leading to a drop in reporting rates at feeders.

Rise in Stock Dove counts

Stock Doves were recorded in more gardens than usual for most of the winter. Breeding Bird Survey results also showed a similar rise in Stock Dove numbers. This suggests that Stock Doves had a successful breeding season in 2018. These often overlooked pigeons are capable of breeding throughout the year as long as conditions remain



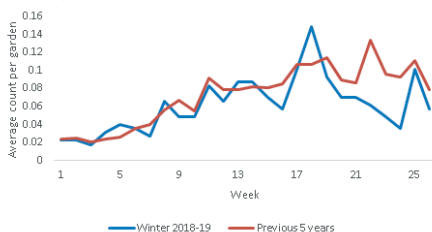
STOCK DOVE, BY LIZ CUTTING / BTO

suitable, reusing nest sites. This allows Stock Doves to produce as many as four broods throughout a suitable year, particularly if the autumn remains mild.

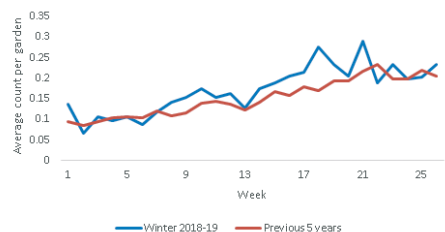
Success Stories

GBFS participants reported a higher rate of Carrion Crow and Rook visits than seen in the previous five years, which may imply that their usual food supplies were in short supply and that feeders became a reliable alternative. Carrion Crows are more often

(c) Song Thrush



(d) Stock Dove





CARRION CROW, BY SARAH KELMAN / BTO

seen in gardens than Rooks, with Carrion Crows recorded in 42% of GBFS gardens compared to 25% for Rook, but Rooks often visit feeders in large numbers, while Carrion Crows are seen singly or in small groups. Numbers of both have remained stable, both nationally and in gardens, for many years, with only small annual fluctuations due to weather conditions.

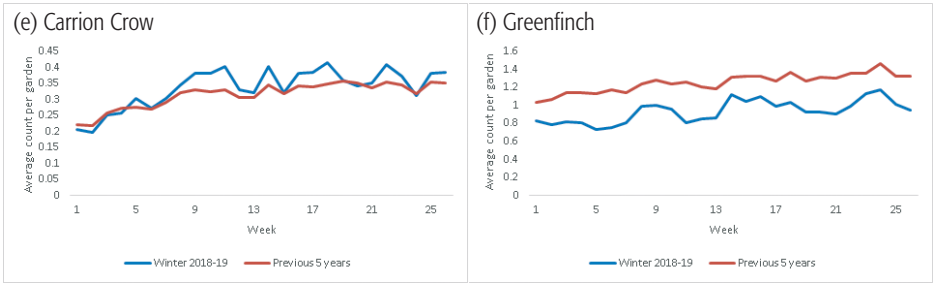
Impact of disease

We continue to see declines in a few common garden species. The marked decline in Greenfinch populations has been well reported for some time. The ongoing decline in Greenfinch can be clearly seen in the GBFS figures for the species, which shows that the average counts for the 2018/19 winter are much lower than the average for the previous five years. Less widely reported are the declines in both Collared Dove and Chaffinch. Trichomonosis, which BTO research reveals is behind the decline of Greenfinch populations in the UK, may also be implicated in the Chaffinch and Collared Dove declines, but more work is needed to explore this. Some recovery has been seen in Greenfinch numbers in certain areas.

Soaring Kites

Red Kite is moving from a scarce and occasional visitor to garden feeding stations to a more regular one, being seen consistently in a small number of gardens each week. This is likely due to the increased practice of putting meat out for these large raptors, who are quick to take advantage of a new food source. This, combined with their widening distribution, means we are

Garden Bird Feeding Survey average peak count per garden for winter 2018–19 for (e) Carrion Crow, (f) Greenfinch, (g) Red Kite, and (h) Red Kite.





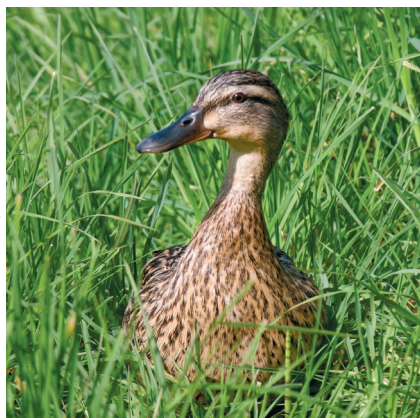
RED KITE, BY SARAH KELMAN / BTO

quite likely to see this trend continue in the coming years. Red Kite numbers increased in the UK by 9% between 2017 and 2018, according to the BTO/JNCC/RSPB Breeding Bird Survey, so it's not surprising that counts were high during the winter of 2018/19.

Not such nice weather for ducks

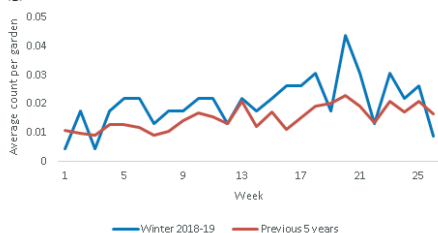
While not a common garden bird, enough of you have recorded Mallards over the years to allow us to begin to see some trends in their patterns of garden feeding station use. This

familiar duck has shown a decrease over the past five years, and it is interesting to note that the latest Wetland Bird Survey report shows a similar decline, which might indicate the drop in the reporting rate in gardens is part of a wider trend, as opposed to a change in garden feeding practices. Climate change may be having an impact, with fewer continental birds making the journey as conditions are milder, but the pattern might also be linked to changes in the numbers of Mallard released by wildfowlers. Interestingly, the decline evident in core monitoring figures has seen Mallard placed on the UK Amber List of Birds of Conservation Concern.

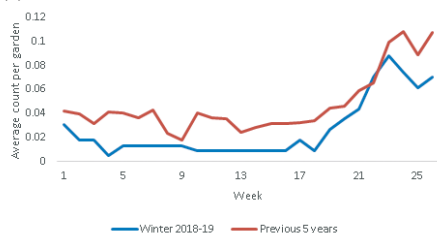


MALLARD, BY JOHN HARDING / BTO

(g) Red Kite



(h) Mallard



Garden Bird Feeding Survey Results

Winter 2018/19

Top 12 species

Species	Plots	%
Robin	228	99.6
Blackbird	226	98.7
Blue Tit	226	98.7
Dunnock	221	96.5
Great Tit	216	94.3
Woodpigeon	203	88.6

Species	Plots	%
Chaffinch	202	88.2
Coal Tit	197	86.0
Goldfinch	194	84.7
House Sparrow	189	82.5
Collared Dove	177	77.3
Magpie	173	75.5

Additional species

Species	Plots	%
Starling	170	74.2
Long-tailed Tit	163	71.2
Greenfinch	155	67.7
Jackdaw	133	58.1
Great Spotted Woodpecker	130	56.8
Sparrowhawk	112	48.9
Carrion Crow	96	41.9
Siskin	92	40.2
Song Thrush	88	38.4
Wren	87	38.0
Pheasant	76	33.2
Nuthatch	72	31.4
Blackcap	57	24.9
Rook	57	24.9
Pied Wagtail	56	24.5
Feral Pigeon	54	23.6
Bullfinch	51	22.3
Herring Gull	37	16.2

Species	Plots	%
Stock Dove	32	14.0
Black-headed Gull	25	10.9
Marsh/Willow Tit	25	10.9
Lesser Redpoll	24	10.5
Yellowhammer	18	7.9
Reed Bunting	17	7.4
Goldcrest	16	7.0
Mistle Thrush	15	6.6
Redwing	15	6.6
Fieldfare	12	5.2
Red-legged Partridge	10	4.4
Grey Wagtail	9	3.9
Mallard	8	3.5
Moorhen	8	3.5
Red Kite	7	3.1
Lesser Black-backed Gull	7	3.1
Buzzard	5	2.2
Common Gull	5	2.2

Species	Plots	%
Hooded Crow	5	2.2
Chiffchaff	4	1.7
Ring-necked Parakeet	4	1.7
Treecreeper	4	1.7
Green Woodpecker	3	1.3
Grey Heron	3	1.3
Tawny Owl	3	1.3
Hawfinch	2	0.9
Linnet	2	0.9
Meadow Pipit	2	0.9

Species	Plots	%
Barn Owl	1	0.4
Coot	1	0.4
Curlew	1	0.4
Rock Dove	1	0.4
Great Black-backed Gull	1	0.4
Kestrel	1	0.4
Peregrine	1	0.4
Twite	1	0.4
White Wagtail	1	0.4

Focus on sites

We received records of 72 bird species from 229 gardens in the winter of 2018/19. A total of 461,612 individuals were counted of these 72 species. The average number of species reported in GBFS gardens this season was 20. Two gardens reporting 33 species each topped the charts, with another three gardens reporting 30 or more species.

Some of the more unusual sightings have included Twite, which has not been recorded in any gardens for the previous five years. Hawfinch was recorded in more weeks in 2018/19 than in the previous five years, but only seen in two gardens during the year. Among the more unusual predators making use of the animals drawn to your garden feeders were Kestrel, Barn Owl and Peregrine.



The influence of feeding on garden bird communities

As Michelle Gault reveals, a new analysis of Garden Bird Feeding Survey data reveals how our garden bird communities have been shaped by the food we provide.

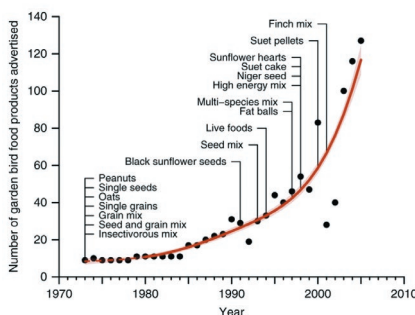
Background

Garden bird feeding has become a huge industry, with the amount of food that we provide to garden birds numbering in the hundreds of tonnes. This has grown from a relatively small activity into the scale we see today as many people feed their garden birds in an attempt to get closer to, and care for, wildlife. BTO Research Ecologist Kate Plummer chose to investigate the impact of this food source and how garden bird communities have changed in response, using data provided by GBFS volunteers.

GBFS data, taken from over 1,000 gardens over 40 years, were compared against the different food sources sold by the bird feeding industry. By using advertising materials published in the long-running RSPB *'Birds'* magazine, which reached over two million readers from 1973–2005, a timeline could be produced showing when new foods were introduced to the market by the main players in the UK's wild bird feeding industry.

By comparing GBFS records with data on the appearance of particular foods in adverts, it was discovered that as the bird food offered has diversified, so has the community of birds using our feeders. During the 1970s, just two species accounted for half the records of birds using feeders, but by 2010 the number of species making the same proportion of visits had more than tripled.

Changes to the British garden bird feeding industry over time



Changing Populations

This dataset has not only shown how diversity has increased but also how individual species' populations have changed in response to particular food stuffs. Goldfinch has shown a marked increase in garden use, benefiting from the introduction of niger seeds and sunflower hearts.

A wide range of birds who usually inhabit different niches have moved onto feeders, as the range of foods provided has diversified. Nuthatches, Coal Tits and Siskins have all become more frequent visitors to our garden feeders. Some species, such as Song Thrush, House Sparrow and Marsh Tit, would appear to be seen on feeders less often now. These species have all suffered from sharp population declines, which is then presumably reflected in the number visiting

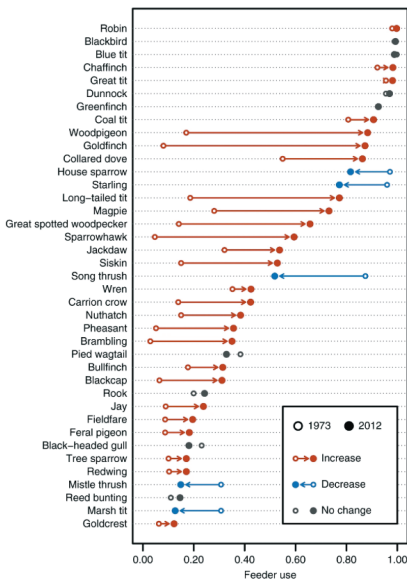
gardens, as opposed to feeders becoming less palatable to these species.

Evolution of Bird Feeding

The culture surrounding bird feeding has changed dramatically over the last 50 years. Previously, garden bird feeding was only popular during the winter months, but year round feeding has now become widespread. Within Britain, this type of supplementary feeding is now thought to provide enough to feed an estimated 196 million birds.

Not only has the type of food provided changed, but there has also been a change in how food is provided. Where once food was largely scattered on the ground, bird tables and hanging feeders are now being used by people wishing to see more wildlife in their gardens. Changes in feeder design have also played their part.

Change in feeder use (proportion of GBFS gardens where species used feeders) between 1973 and 2012.



Future Research

Research is still required on whether, and how, nutritional quality and disease transmission at feeders may impact the



TREE SPARROW, BY SARAH KELMAN / BTO

populations of those species visiting garden feeding stations. Additionally, we also want to understand the role that gardens and garden feeders may play in supporting populations of declining species, such as House Sparrow and Song Thrush.

With greater coordination of feeding activities across networks of garden bird feeders, we could deliver innovative approaches to large-scale conservation or species management outcomes in the future. With innovation in feeder design, greater food diversity, and refinement of food quality all influencing the frequency of feeder use and changes in both population size and community structure of birds, GBFS data have growing potential to provide an indication of how our national bird populations change, which could be important in future years.

Plummer, K.E., Risely, K., Toms, M.P. & Siriwardena, G.M. (2019). The composition of British bird communities is associated with long-term garden bird feeding. *Nature Communications* DOI:10.1038/s41467-019-10111-5

Extracts and highlights from Winter 2018/19

October

Lymington – We haven't had much rain since May. Goldfinches showing a preference for niger.

Orkney – 'First ever Hawfinch in the garden – a lifer for me. Big blow brought in loads of migrants on 13 October'

Inverness-Shire – Mild, wet week. Increasing numbers of Chaffinches. Corvids now dominating all of the feeders, having first cleaned up any peanuts left behind overnight. Jackdaws expert at unhooking feeders to spill seeds.

Folkestone – 'Sunny Intervals – warm. Magpie taking dried meal worms and hiding them under neighbours' roof tiles'



HAWFINCH, BY SCOTT MAYSON / BTO

November

Inverness-Shire – 'What a week for birds! Is this a visible sign of climate change or supplementary feeding? A Nuthatch! It was here late summer but then disappeared.'

Nottingham – 'Sparrowhawk on watch daily in this garden or next door's tree'

Yelverton – 'Warty-footed Chaffinches feeding regularly; look healthy but uncomfortable. Odd skirmish behaviour between male Pheasant and two crows. Mr Pheasant very definitely trying to chase them away from the ground feed – he won!'

Bristol – 'Tray mix added again to raised area. Coal tit seen on fat balls but Starlings soon put paid to that.'



COAL TIT, BY LIZ CUTTING / BTO

December

Sussex – 'Marsh tits back. Good numbers of Goldfinches. Feeders needing filling daily'

Cornwall – 'Welcome sighting of one male Blackcap, first for several years (previously one or two every winter)'

County Antrim – 'Delighted to see three Tree Sparrows on feeder. In 26 years living here I had seen one only once, many years ago.'

Folkestone – 'Blackbird outside back door early morning waiting for his sultanas.'

SPARROWHAWK, BY TOMMY HOLDEN / BTO



January

Orkney – ‘Sparrowhawk killed two Rock Doves – ate one and cached the second. Came back next day to eat the other one.’

Edinburgh – ‘Female Blackcap persistently driving male away from peanut cakes and refusing to let him feed, although plenty of room for both inside protective cage.’

Dumfriesshire – ‘Female Blackbird ‘asking’ for currants on kitchen window sill’

Cambridge – ‘Song Thrush disappeared Sunday, probably had enough of being chased by a particularly aggressive female Blackbird which tries to monopolise the feeding area.’

JAY, BY LIZ CUTTING / BTO



February

Ilminster – ‘Most of week fine, warm, with plenty of sunshine and some frosty dawns. Birds definitely pairing up now. Solitary Fieldfare guarding crab-apple! His “flock” are in neighbouring orchard’

Grange-Over-Sands – Two sick Chaffinches and a Collared Dove seen this week. I stopped feeding and disinfected feeders at the end of week.

Worcestershire – Blackcap definitely feeding on Mistletoe berries on apple tree. Having difficulty cleaning its beak afterwards’

Alton – Magpies have found how to hang on fat feeder! They aren’t daft are they!’

LESSER REDPOLL, BY LIZ CUTTING / BTO



March

Lanarkshire – ‘Dry all week – two days of sun but a cold wind. Four Lesser Redpoll (two pairs) on niger seed!’

Aberdeenshire – Robins have vanished – sadly, also smaller numbers of birds despite milder sunny days. However, Wren adding moss to nest in conifer.

St Austell – ‘Jay ate Ivy berries first and then came and ate ground food’

Newcastle Upon Tyne – ‘Yellowhammer makes first appearance since spring 2017 and stayed for two weeks’

Looking ahead

The 2020/21 Winter

The temperature for the majority of the 2019/20 winter was relatively mild, with few ground frosts and little snow. February was particularly wet and stormy, and included three named storms and high rainfall. Warm, frost-free conditions could allow a recovery of the populations of cold-sensitive species. However, rainfall has been well above average, with flooding in several areas. It will be interesting to see what effect this might have on garden birds.



SISKINS, BY EDMUND FELLOWES / BTO

BTO GARDEN BIRD FEEDING SURVEY

Contact us: GBFS, BTO, The Nunnery,
Thetford, Norfolk IP24 2PU

Phone: 01842 750050

Email: gbw@bto.org

Website: www.bto.org/GBFS

GBFS has been monitoring the numbers and variety of garden birds coming to supplementary foods in winter since 1970. It is the longest running annual survey of its kind in the world and allows direct comparison of garden types and locations over time.

The GBFS Team

Rob Jaques: Supporter Development Officer

Kate Risely: GBW Organiser

Samantha Graham, Samantha Culverhouse,

Jamey Redway: The BTO Supporter team

Alic Prior: Data entry

A special thank you to Alic Prior who has entered over 2 million lines of data in Excel voluntarily for the GBFS over 10 years. Thanks also to volunteer Michelle Gault who helped produce content for the newsletter.

We aim to be a responsible business, with our printing choices reflecting this approach.