

SEASONAL REVIEW

January to March 2025

Wren, by David Tipling / birdphoto.co.uk

Unusual weather patterns can alter the rhythms of our gardens. From sudden cold snaps to early sunshine, these shifts can shape which species we see, when they appear, and how many turn up. In this Quarterly Review, **Santiago Cárdenas** explores your Garden BirdWatch data, with an eye to these shifting patterns.

WREN

The emblem of the Garden BirdWatch and a beloved garden visitor, Wren populations are known to fluctuate in response to winter weather conditions. They're one of the UK's smallest birds and have high energy needs, especially in cold weather, so they are particularly sensitive to periods of bad winter weather and freezing conditions. Fortunately, given a good breeding season these populations can be quick to bounce back.

Your data for Quarter One, which saw an average weekly reporting rate of 34% – so just over one in three gardens – are slightly up on the same period for the previous three years, although down on the longer-term average. The increasing pattern of milder UK winters, a consequence of climate change, is likely to benefit our Wrens, as evidenced in the *BTO Birds and Climate Change Report*, authored by James Pearce-Higgins.

Of course, your Garden BirdWatch reporting rate figures don't just reflect the size of the Wren population; they are also shaped by Wren behaviour. Although not migratory, UK Wrens may leave their breeding territories to winter in more favourable habitats, where they can establish winter feeding territories. Such habitats include damp woodland and riverside or reedbed sites, where the damper conditions can support greater levels of invertebrate activity throughout the

winter months. We don't know to what extent garden Wrens move elsewhere – and it might be that they don't. The data from Garden BirdWatch show a drop in garden reporting rates during the spring and summer – which could imply that Wrens move into gardens for the winter – but it might also be more difficult to pick out a visiting Wren when spring and summer plant growth increases the amount of garden cover.

There's another interesting aspect to all of this. BTO research on Wren populations and local climate has revealed that Wrens in colder regions (e.g. Scotland) appear to have evolved to better survive lower winter temperatures than those in milder regions (e.g. southern England). That there is long-term local resilience built into Wren populations might help explain why this small bird is so successful, being found in 83% of breeding season and 77% of winter season survey squares in Bird Atlas 2007–11.

GOLDCREST

The Goldcrest is the UK's smallest bird, and like Wren, it is highly sensitive to cold winter weather. Its tiny size, insectivorous diet, and preference for coniferous woodland (or well-treed gardens) signify that prolonged periods of frost or snow can be deadly. That this is the case was brought home by the effects of February

2018's 'Beast from the East', which had a significant effect on the UK Goldcrest population.

Long-term monitoring data from the BTO/JNCC/RSPB Breeding Bird Survey neatly show the sudden and substantial drop in Goldcrest abundance between the 2017 and 2018 breeding seasons, and the gradual recovery since then. Interestingly, while UK Wren populations increased by a significant 5.52% between 2018 and 2023, Goldcrest populations only increased by 1.43% over the same period. Like Wren, Goldcrest can be a prolific breeder, with two broods of six to eight eggs each year.

COMMON FROG

Common Frogs are often regarded as a sign of spring, with frog-spawn spotted in gardens as early as January. Common Frogs typically hibernate in sheltered, frost-free places such as log piles, compost heaps, or the muddy base of ponds, before then emerging from their winter dormancy to breed. While we've not seen signs of an early emergence this year, there's been a clear spike in the abundance of Common Frogs in Garden BirdWatch gardens for Quarter One, generating the highest average weekly count figures in several years.

Amphibians are highly sensitive to environmental conditions, and it's been shown that the breeding phenology of Common Frogs can be affected by temperature and weather. In fact, studies show that breeding migrations are triggered when temperatures rise above 5°C and stay mild for several consecutive days, particularly following rain. Long-term studies in the UK have also found that warmer temperatures are correlated with earlier dates of arrival at breeding sites, as well as earlier breeding and spawning. This year's spring, mild and rainy, likely created stable conditions that promoted amphibian emergence, leading to higher visibility and increased Garden BirdWatch counts.



Common Frog, by Mike Toms / BTO

BUFF-TAILED BUMBLEBEE

If you think you've been spotting more Buff-tailed Bumblebees this spring, then you are not wrong. The first quarter of 2025 saw a marked and unprecedented increase in the numbers reported through Garden BirdWatch. Buff-tailed Bumblebee queens are among the earliest pollinators to emerge, triggered by the warmer weather, and numbers increase through to a summer peak as the resulting colonies grow and new generations of workers emerge.

Quarter One provided a succession of favourable conditions that seem to have encouraged a surge in activity. January was unusually sunny, especially in northern regions, which may have buffered thermal conditions in sheltered urban areas where Buff-tailed Bumblebees commonly hibernate. Then, February brought a transition toward milder weather, lifting temperatures to slightly above average, before settling again. And March, with high temperatures and exceptional sunshine, was likely instrumental in setting up the mass awakening of Buff-tailed Bumblebee queens.

While it's encouraging to see so many Buff-tailed Bumblebees so early in the year, it's also something to keep an eye on. There's concern that Buff-tailed Bumblebees might be out-competing other, less adaptable pollinators, and this problem may be made worse by the thousands of Buff-tailed Bumblebee colonies imported from mainland Europe since the 1980s for commercial pollination purposes. Some of these escape into the wild, adding to the local bee populations. These individuals may be more likely to be active through the winter, and to emerge earlier.

Continued monitoring is essential to assess whether the pattern seen this year is the result of a short-term weather effect or a longer-term shift driven by climate change and the commercial introduction of Buff-tailed Bumblebees from a different part of their range and with different activity patterns. Your Garden BirdWatch data may well be able to help us with this important question. ■



Goldcrest, by David Tipling / birdphoto.co.uk

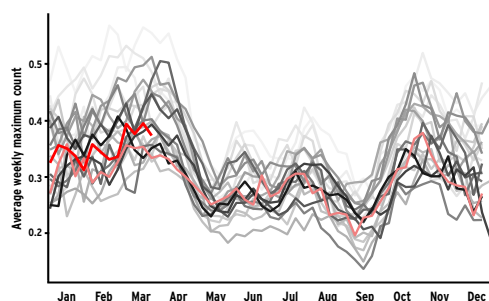
Santiago Cárdenas is the BTO Garden BirdWatch Survey Organiser, responsible for the day-to-day operation of the survey.

RESULTS: Quarter One 2025 (January–March)

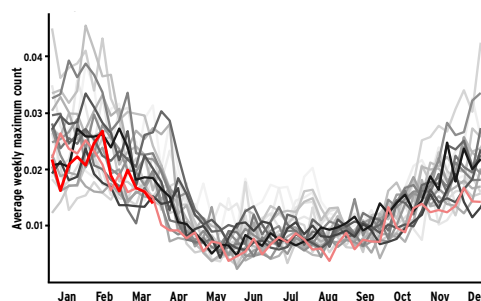
HOW DO GARDEN WILDLIFE COUNTS THIS YEAR COMPARE TO PREVIOUS YEARS?

These graphs show the average maximum weekly count for all GBW gardens, comparing this year so far to previous years. The **bold red** line represents counts for **2025**, the **red line** for **2024** and, and previous years are shown in grey; the paler the line, the further back in time the data are. We've chosen six notable species to show you this quarter.

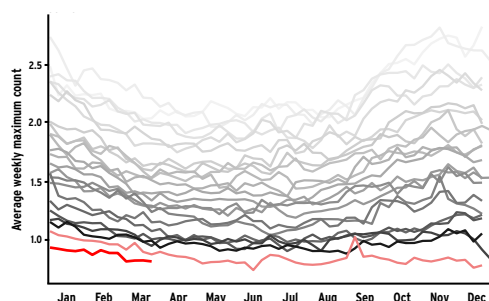
WREN



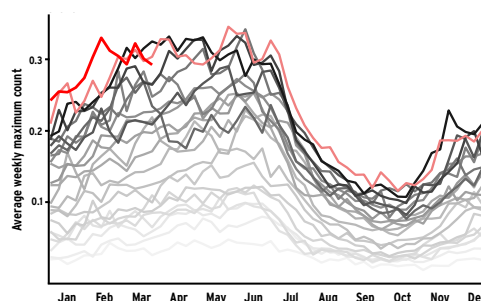
TREECREEPER



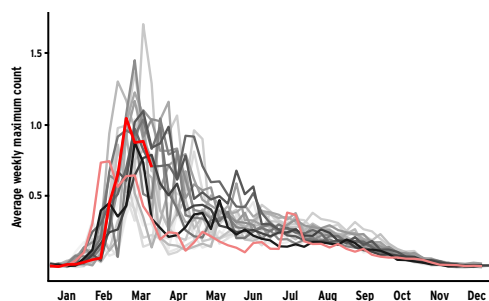
COLLARED DOVE



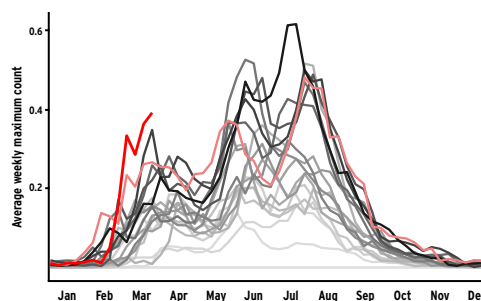
STOCK DOVE



COMMON FROG



BUFF-TAILED BUMBLEBEE

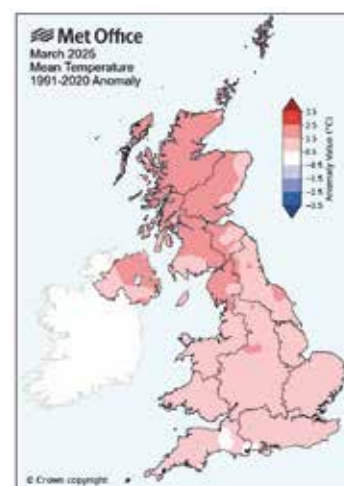
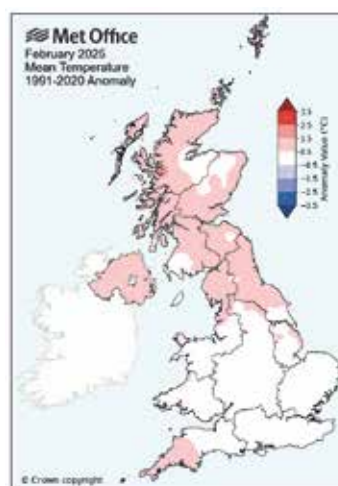


THE WEATHER

January was cold and stormy. Temperatures were below average but rainfall was varied: southern England saw over 100% of the average, while Scotland and Northern Ireland were much drier. Storms Eowyn and Herminia brought destructive winds and heavy rain. Despite this, the month was sunnier than average, especially in the north, with 130% of typical January sunshine.

February started largely settled and cool but turned wetter and milder mid month. Temperatures were above average, while rainfall was below average overall at 76% of the norm. Sunshine was slightly below average, though northern Scotland was unusually bright with 137% of typical sunshine. The month ended with high pressure, widespread frost, and fog in many areas.

March was dominated by high pressure, bringing settled, dry, and sunny weather throughout. Temperatures were above average – the 10th warmest March on record. Scotland and Northern Ireland were particularly warm, while fog and frost featured early in the month, especially in the south. Rainfall was well below average: Wales saw its driest March since 1944, and it was the UK's third sunniest March.



The table shows the average weekly reporting rate for this quarter for each of our 'core' species, ranked highest to lowest, and expressed as a percentage. Also shown are reporting rate comparisons for 1) the same quarter the previous year, 2) the average for this quarter over the last five and 10 years, and 3) the change in long-term average for this quarter, shown as percentage change. All figures are rounded to a whole number, with the percentage changes calculated on the original data.

SPECIES	5-year average					Q1 2025	Q1 2024	Q1 5yr average	Q1 10yr average	Q1 change since 1995
	0	20	40	60	80					
Blackbird	<div><div></div><div></div><div></div></div>					91	89	93	94	-5
Blue Tit	<div><div></div><div></div><div></div></div>					90	91	91	91	-4
Robin	<div><div></div><div></div><div></div></div>					90	89	90	91	-1
Woodpigeon	<div><div></div><div></div><div></div></div>					90	90	89	89	20
Great Tit	<div><div></div><div></div><div></div></div>					76	76	76	77	-3
Dunnock	<div><div></div><div></div><div></div></div>					75	74	77	79	-6
Magpie	<div><div></div><div></div><div></div></div>					63	63	61	59	14
House Sparrow	<div><div></div><div></div><div></div></div>					56	59	61	61	-16
Goldfinch	<div><div></div><div></div><div></div></div>					56	57	60	61	25
Chaffinch	<div><div></div><div></div><div></div></div>					50	50	55	61	-32
Starling	<div><div></div><div></div><div></div></div>					42	43	47	48	-29
Coal Tit	<div><div></div><div></div><div></div></div>					42	43	46	48	-11
Collared Dove	<div><div></div><div></div><div></div></div>					41	45	48	53	-37
Long-tailed Tit	<div><div></div><div></div><div></div></div>					39	38	40	41	13
Jackdaw	<div><div></div><div></div><div></div></div>					38	38	36	35	36
Wren	<div><div></div><div></div><div></div></div>					34	31	34	35	-9
Greenfinch	<div><div></div><div></div><div></div></div>					33	33	33	36	-43
Carriion Crow	<div><div></div><div></div><div></div></div>					29	29	29	29	5
Great Sp. Woodpecker	<div><div></div><div></div><div></div></div>					24	24	25	25	1
Feral Pigeon	<div><div></div><div></div><div></div></div>					22	22	20	18	54
Blackcap	<div><div></div><div></div><div></div></div>					16	12	14	13	31
Nuthatch	<div><div></div><div></div><div></div></div>					15	15	17	17	4
Song Thrush	<div><div></div><div></div><div></div></div>					12	11	13	16	-50
Stock Dove	<div><div></div><div></div><div></div></div>					12	10	9	7	183
Bullfinch	<div><div></div><div></div><div></div></div>					10	8	11	12	-6
Jay	<div><div></div><div></div><div></div></div>					10	8	9	10	-7
Sparrowhawk	<div><div></div><div></div><div></div></div>					10	12	12	12	-12
Rook	<div><div></div><div></div><div></div></div>					9	9	9	9	0
Siskin	<div><div></div><div></div><div></div></div>					9	17	11	12	-32
Pied Wagtail	<div><div></div><div></div><div></div></div>					7	6	7	8	-33
Goldcrest	<div><div></div><div></div><div></div></div>					5	5	5	6	-12
Tree Sparrow	<div><div></div><div></div><div></div></div>					5	5	5	5	-12
Ring-necked Parakeet	<div><div></div><div></div><div></div></div>					5	4	4	3	154
Black-headed Gull	<div><div></div><div></div><div></div></div>					3	2	3	4	-47
Tawny Owl	<div><div></div><div></div><div></div></div>					3	3	3	3	-4
Chiffchaff	<div><div></div><div></div><div></div></div>					3	2	2	1	282
Fieldfare	<div><div></div><div></div><div></div></div>					2	2	2	3	-53
Mistle Thrush	<div><div></div><div></div><div></div></div>					2	2	2	3	-65
Redwing	<div><div></div><div></div><div></div></div>					2	4	4	4	-55
Green Woodpecker	<div><div></div><div></div><div></div></div>					2	2	2	2	24