

Wintering Chiffchaffs in Worcestershire

Peter Holmes



01. The presence of Chiffchaffs in winter was once considered exceptional but they are now common. Gary Farmer

I started ringing birds in 1974, with a ringing group at Maple Cross sewage works in Hertfordshire. The ringing group had five experienced ringers and each year they had an informal contest to see who could catch the first warbler. The contest was spoiled in 1975 when one of them caught a Chiffchaff (*Phylloscopus collybita*) on 1st January. Back then wintering Chiffchaffs were an exceptional event, but now they are just considered normal. Whilst not as prominent as Blackcaps (*Sylvia atricapilla*), which visit feeding stations and can be aggressively dominant, Chiffchaffs are more usually encountered by their quiet 'hweet' call from a hedge. However numbers concentrate at sewage treatment works (STWs) where they can feed on the high numbers of insects there, especially moth flies from the family Psychodidae.

So how many Chiffchaffs are out there in winter?

Over the winter of 2022/23 I ringed birds in four Worcestershire STWs; Upton upon Severn (shortened to 'Upton' below), Kempsey, Lower Moor and Hanley Castle (Table 1). Winter is taken as the three months from December to February to eliminate birds on late autumn or early spring passage. This was not a standardised study - ringing is dependent on good weather (generally dry with light winds) - so visits were made opportunistically.

The total number of individual Chiffchaffs trapped in winter 2022/23 at each site is given in Table 1 below. This includes previously unringed birds, recaptures of individuals originally ringed outside the winter period and captures of individuals originally ringed elsewhere.

STW site	Size estimate	Number of visits	Number of Chiffchaffs caught
Upton upon Severn	Lower medium	4	19
Kempsey	Lower medium	6	61
Lower Moor	Small	3	46
Hanley Castle	Very small	4	10
Total			136

Table 1 – number of different Chiffchaffs caught in each STW in winter 2022/23.

A small amount of ringing had been carried out at Lower Moor STW since 2020, but is insufficient for comparisons to be made, and

Kempsey and Hanley Castle were new sites for me last winter. Winter ringing however has been carried out at Upton since 2004 and with highly variable numbers of Chiffchaffs trapped each winter (Table 2), although the last four winters have been relatively consistent. Substantial construction works to increase sewage capacity have been taking place at Upton since summer 2022, which inevitably caused disturbance of the birds. Following detailed ecological assessment, essential vegetation clearance prior to the works has also temporarily reduced much of the Chiffchaff habitat: the environmental enhancement plan post-construction should restore and increase available habitat here. Access to and within the site for ringing has been severely constrained, but the number of Chiffchaffs caught at Upton in winter 22/23 was still quite high.

Year	2004/5	2005/6	2006/7	2007/8	2008/9
Birds	13	6	6	5	3
Visits	5	8	7	7	8
Year	2009/10	2010/11	2011/12	2012/13	2013/14
Birds	22	0	1	3	5
Visits	5	3	5	5	4
Year	2014/15	2015/16	2016/17	2017/18	2018/19
Birds	26	12	9	16	4
Visits	7	4	5	7	2
Year	2019/20	2020/21	2021/22	2022/23	
Birds	16	25	19	19	
Visits	4	6	6	4	

Table 3. Numbers of different Chiffchaffs ringed each winter at Upton upon Severn STW from 2004/5, with the number of ringing visits made.

The only movements between STWs recorded were of two individuals originally ringed at Upton. One ringed in February 2022 was caught at Hanley Castle. Another, ringed in January 2020 and recaptured at Upton in winter 21/22, was caught at Kempsey. It is possible both these birds were displaced by the construction works. No movements were recorded between the four STWs within winter 22/23.

Catching success of Chiffchaffs in STWs is very dependent on weather conditions. Numbers present are greatly increased in cold weather, with, sometimes, flocks developing. For example 40 of the 61 Chiffchaffs at Kempsey were caught on the 13th December, during a prolonged cold spell. This makes sense because even in the coldest weather, the moth flies are still present and quite active. Anecdotal evidence suggests that Chiffchaffs may preferentially roost overnight in STWs and move out along surrounding hedgerows as the day warms up, behaviour reported at Lower Moor (Rob Prudden, pers comm). A Chiffchaff caught and ringed along a hedgerow at Glenmore Farm, Wick at 10am on the 19th January was recaptured at Lower Moor at 9am on the 20th January: the ringing site was 1km away from the STW, on the other side of the River Avon.

It is not easy to draw conclusions about the overall numbers of Chiffchaffs present between years from the data presented. Catching success of Chiffchaffs is greatest in cold and still conditions. These conditions do not occur every winter, and it is not always possible to take advantage of them for ringing when they do. So those years where smaller numbers of Chiffchaffs were caught may well just have been winters where they dispersed across the countryside rather than congregating at STWs, or where no good catching - condition days were available. However cold snaps are becoming less frequent with climate change, and yet numbers of Chiffchaffs caught at Upton has remained consistently higher for the last four winters.

Severn-Trent Water has 163 sewage work sites in Worcestershire (Emma Abbott, Severn-Trent Water pers comm). These will range in size from tiny village facilities (some of which will have no suitable habitat present) to the very large STWs in Kidderminster and Worcester. If there were 136 Chiffchaffs caught across the four

smaller STWs (and not all are trapped, with birdwatchers noting still un-ringed individuals), how many wintering Chiffchaffs are there across the whole of Worcestershire? It might be a meaningless exercise, but these four STWs averaged 34 Chiffchaffs in winter 2022/23. If that was repeated across all 163 STWs in the county there would have been over 5,500 STW-associated Chiffchaffs out there. However limited the confidence there is in that figure, the importance of the STWs in supporting wintering Chiffchaff populations cannot be overstated.

So, what is the breeding distribution of the Chiffchaffs wintering at the STWs? Birdwatchers look for the presence of Siberian Chiffchaffs (*P.c. tristis*) – grey/brown birds with little if any green or yellow in their plumage – which are noted occasionally in winter. Since these breed in sparsely populated areas, the chances of recording movements of ringed birds is slight. Several movements though have been recorded which give some insight into the origins of some of the Chiffchaffs wintering in the STWs (Table 3). Most of these show movement to or from the south-east, including one from the Netherlands and another to the Channel Islands, which suggests the breeding distribution may be the near continent, somewhat similar to that for UK wintering Blackcaps (Van Doren *et al.*, 2021). However the movements to or from Derbyshire, East Lothian and Perth & Kinross show that some of the birds present are from more northerly British breeding populations, and the one from Castlemorton Common (being at least seven years old which is a good age for a Chiffchaff!) shows that local breeders are also in the wintering population. So the wintering population in the STWs of Worcestershire is a mix of birds from different breeding areas.

Ringling site	ringing date	Reporting site	Reporting date
Driehoek, Castricum, Noord-Holland, Netherlands	29.11.06	Upton upon Severn	24.12.06

Severn Stoke (not currently visited)	15.2.09	Stanley Downton, Gloucestershire	30.3.13
Lancing College, West Sussex	2.11.16	Upton upon Severn	29.12.16
Upton upon Severn	18.12.16	Wallyford, Musselburgh, East Lothian	4.6.17
Upton upon Severn	4.1.15	Rose Farm, Alderney, Channel Islands	24.11.17
Sandwich Bay Estate, Kent	27.10.19	Upton upon Severn	27.12.19 (and 17.3.21)
Upton upon Severn	11.2.21	Matlock, Derbyshire	23.4.21
Chilling, Warsash, Hampshire	3.11.21	Upton upon Severn	16.1.22
Waterhay, Ashton Keynes, Wiltshire	22.11.20	Hanley Castle	22.12.22
Upton upon Severn	13.12.15	Castlemorton Common	28.4.22
Bomb Dump, RAF Wyton, Cambridgeshire	3.10.22	Lower Moor	20.1.23
Kempsey	12.12.22	Tay Lodge, Errol, Perth & Kinross	22.7.23

Table 3. Ringing and recovery sites for all long-distance Chiffchaff movements recorded from ringing at Worcestershire STWs

Reference

Van Doren, B. *et al.* 2021 Human activity shapes the wintering ecology of a migratory bird. *Global Change Biology* 27(12), 2715-2727.

Image

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