

Tim Harrison, of the BTO Garden Bird Feeding Survey (GBFS), has commented that there have only been five gardens in which Common Crossbills have been observed feeding during the 40 years of the survey. Four of these (in Norfolk, Dorset, Powys and Hertfordshire) are not in Scotland, while the exact location of the fifth is unclear. However, as the GBFS is spread across the UK, with c. 250 gardens per winter, areas in which garden rarities such as Crossbills might be common could be poorly represented.

Participants in the GBFS are recruited from the larger BTO Garden BirdWatch, a year-round survey that records all birds in gardens rather than

only those using food or water. More participants in the BTO Garden BirdWatch would be particularly welcome in Scotland [www.bto.org/gbw](http://www.bto.org/gbw).

It may be that Common Crossbills are more likely to come to feeders in areas where tree cover is scarce or absent. On Shetland, Mike Pennington notes that they tend to ignore feeders, but in one invasion about 10 years ago, once they had found his feeder there were up to a dozen daily in the garden, with 15 ringed over two days.

## Observations on Lesser Whitethroat singing and roosting behaviour in Ayrshire during May 2010

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The Lesser Whitethroat *Sylvia curruca* is on the north-western edge of its breeding range in Scotland. Observers have commented on the relatively short song period of male birds in Scotland which can make censusing this species difficult (see the species account in Forrester *et al.* 2007). No information on roosting behaviour in Scotland has so far been published. These observations were made at two adjacent Lesser Whitethroat territories at the perimeter of the former ICI Ardeer site at Stevenston, north Ayrshire as part of a long-term study of the species in central Scotland (Byars 2010).

On 3 May 2010, between 07:00 and 09:00 (all times are BST), two male Lesser Whitethroats were observed chasing each other and vociferously defending their territorial boundaries which were 10 m apart. The territories were mapped using previous methodology (Byars & Curtis 1998). Male A's territory was estimated at 0.30 ha and male B's at 0.06 ha. Song rates were also measured with full song phrases counted during a ten minute slot in every hour during the day. In my experience, male Lesser Whitethroats have two totally distinctive song types: (a) a trill regarded as the main song phrase, which is a loud, far carrying repetition of two notes which can be heard from over 200 m. Each trill lasts

about 1.5–2 seconds and has an interval of about 8 seconds between song bursts, and (b) a warbling/twittering sub-song, containing many soft warbling notes and quiet chattering segments, only audible at a range of less than 10 m. In territorial males, the sub-song is usually heard as a short prelude to the trill and is sung very briefly, but on other occasions the warbling can last several minutes.

Frequency rates of the trilling song phrase between the two males were noted. Male B was observed to sing far more frequently than male A; an indication that male B was still unmated and male A was paired. A high song rate made male B easier to track in the dense vegetation and I could follow his movements throughout his territory. I returned in the late evening on 4 May. The different song rates of the two males continued. From 20:20 to 21:20 male A sang only once in 60 minutes and was lost to view around 21:00. Male B sang 280+ trilling song phrases during the same time period and was far easier to locate. At 21:05 male B stopped roving along his territorial boundaries and perched 4 m up in the canopy of a mature Hawthorn *Crataegus monogyna* bush. He sang an uninterrupted bout of 70 trilling song phrases in 15 minutes. Apart from the Lesser Whitethroat, the only other passerine species

still singing at dusk was a Grasshopper Warbler *Locustella naevia*; five other warbler species had stopped singing at the site by 21:00.

I decided to try to follow male B to roost. I settled down on the ground, 4 m away, and watched male B. Sunset was at 21:03, but the light conditions were very poor due to thick cloud cover. Male B gave one last song phrase at 21:20 and, still singing, dropped down parallel with the Hawthorn bole and settled in a dense Gorse *Ulex europaeus* bank directly below the Hawthorn. Male B could just be seen perched on a thin branch underneath the dense Gorse sprays at 2 m. I watched the male until darkness fell and left at 21:40.

At the site's perimeter on 5 May 2010 between 07:00 and 09:00, two pairs of Lesser Whitethroats were so busily engaged in song duels and courtship display that I managed to sit and observe pair A from only 2 m. At 8:00, male A started a soft, sub warble, perched 1.5 m up in a dense patch of mixed scrub, with the

female 2 m away, but well hidden. After 20 seconds of nondescript warbling notes, the male began to imitate Skylark *Alauda arvensis* flight song for 6–8 seconds, after which he reverted to his normal warbling repertoire. This was the only occasion I have heard mimicry in 27 years of field work in Scotland.

On 6 May I returned to the site at 20:00 and discovered that male B was still vociferously singing, while male A was observed, but silent. Sunset was at 21:07. Male B was again easily tracked while singing and patrolling through his territory. Between 21:20 and 21:30 male B sang 44 trilling song phrases in a stand of mature Hawthorns, 12 m away from the previous night's roost. He could be seen settling to roost among dense Hawthorn sprays 4 m up in the canopy. Again, darkness made observations difficult but, at 21:40, I made a 'tuk' call four times. Male B immediately responded, and sang one trill song phrase in the darkness. I left the site at 21:45.



Plate 1. Lesser Whitethroat roost site at Ardeer, Ayrshire. The male was observed roosting in the dense Gorse bank just to the left of the Hawthorn, May 2010. © Tom Byars



**Plate 2.** Portrait of a mimic - male Lesser Whitethroat, Ardeer, Ayrshire, May 2010. © Tom Byars

Counting song rates by male B on 8 May showed a frequency of 280+ trilling phrases in 60 minutes during the day. That evening, though, male B could not be heard singing at all from 19:45 to 21:45 and so could not be observed going to roost. On the following morning, male B was observed with a female in close attendance; he only uttered only one trilling song phrase during 60 minutes of observation. Observations on roosting behaviour ended on 8 May to avoid further disturbance and any risk of site desertion.

Both pairs were observed carrying food on 11 June and pair B successfully fledged four young.

My observations on Lesser Whitethroat song are in line with those made in England and continental Europe (Cramp & Simmons 1992) although the fact that Lesser Whitethroats usually occur at low densities in Scotland may explain why some breeding attempts take place with little or no song noted by observers (e.g. da Prato 1980). Research by Klit (1999) into the song function of the Lesser Whitethroat found that the trill is used for male-to-male communication over long distances. The warbling or twitter is quietly delivered by males in communicating with females in close proximity, without giving their location away to other males seeking extra copulations. The only other documented case of mimicry I know of was of an unmated male briefly mimicking the song of a Great Reed Warbler *Acrocephalus arundinaceus* in north-west Germany (Wiehe 1989). Very little has been published on

roosting behaviour anywhere, but Cramp & Simmons (1992) quotes two instances: a pair perched side-by-side in a willow *Salix* bush and another pair using a bush near a house; this male sang at night possibly due to artificial lights. However, Cramp & Simmons (1992) also note Lesser Whitethroats occasionally singing after dark in other situations.

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**Tom Byars, 81 Sharpill Road, Saltcoats KA21 5QU.**

**Email: [tombiars@btinternet.com](mailto:tombiars@btinternet.com)**

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