

A project of Sedgefield Development Trust



Common Bird Census Report 2023

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THE 2023 COMMON BIRD CENSUS Woodland and Wildlife Community Woodland, Sedgefield

Introduction

During March to June 2023, the third annual breeding bird censuses was carried out at the Woodland and Wildlife community woodland in Sedgefield.

From the mapping fieldwork, an estimation of the number of bird territories at the woodland is then calculated. This report summarises this data, makes comparisons with the previous years and looks at the overall UK bird population trend for selected species. Using the data collected, it is possible to better understand the birds at the woodland to enable proactive habitat management to conserve and protect these species present and encourage wider biodiversity.



2020 sapling areas. These are well established & attracted a pair of Common Whitethroat (Frederick Milton) Front Cover – Sedge Warbler (Brian Clasper)

The Common Bird Census Methodology

The Common Bird Census (CBC) is based upon a simple mapping method devised by the British Trust for Ornithology, in which eight to ten visits are made to a defined site over the breeding season, March to June. All contacts with birds, by sight or call, are recorded by species code on a large-scale map. Additional symbols are added to denote whether the bird is singing, calling, or moving in a certain direction, its sex if known, if there is nesting behaviour and whether the species is involved in any territorial boundary disputes with another bird. This additional behaviour is crucial. A registration of a singing male bird immediately identifies it as a bird holding or marking territory. Similarly, nesting behaviour indicates the existence of a nest and therefore a species holding territory. Territories are defined, for the purpose of the study, as a bird being present in the same area over a 14-day period. Unless a nest or similar evidence exist, birds which are recorded less than three times in the same area are not deemed to be holding territories.

At the end of the season these 'visit' maps are examined, and each site visit given a visit letter: A, B, C etc. Each record on the visit map is transferred to separate 'species' maps' to show how each type of bird is distributed across the site and the individual bird's breeding territories. From this, an estimate of breeding density for the site can be calculated. Nest boxes installed on the site are checked and this additional information feeds into the CBC analysis.

The Survey Site



Outline of surveyed area (Google Map 2021)

The Woodland and Wildlife site is a strip of land to the north of Sedgefield village in County Durham. The site is approximately 13 acres in area and is bounded on two sides by roads – William Armstrong Way on the west side and on the east, the B1278 Salters Lane, Fishburn to Sedgefield road.



Looking east – mosaic of sapling trees and herbage – excellent for insects (Frederick Milton)

The north of the site is mainly bounded by rank vegetated fields of principally Rosebay willowherb (*Chamaenerion angustifolium*) a valuable food source for numerous species of moths and butterflies, a useful nectar source for pollinators, including bees, and a superb habitat for many bird species, particularly Common Whitethroat. The north side also includes hedgerows, agricultural farmland, farmsteads, and then Hardwick Grange, a new housing development. To the south lies the NETPark or North East Technology Park Science park, mixed housing and then Sedgefield village. The west side of the site was previously agricultural land, the remainder formed part of the grounds of the now demolished Sedgefield Hospital. This legacy includes remanent 'ornamental' tree species, such as Laurel and Privet, as well as some ancient Beech trees.

The site is best described as a blend of parkland and 'marginal' land. There are some notable habitat features. These include a small Scots Pine woodland (the 'Pine Wood'), mixed hedgerows and plantations of Dogrose, Sweet Chestnut, Ash, Buckthorn, Sycamore, Hawthorn, Elder, Beech and Alder, a small pond dominated by Bulrush (*Typha latifolia*), and a mature woodland of mostly Sycamore, Ash and Beech ('Salters Lane Wood'). There are also areas of marginal grassland which has a rich mosaic of flora and some mown lawns managed by the NETPark site. Since 2018, the site has been managed for wildlife by the Sedgefield Woodland and Wildlife community group. Saplings of native tree species have been planted in three phases, the most recent being a mixed species hedgerow in 2021. Several footpaths traverse the site. Habitat work in 2023 remained low key; 'dead hedge' creation, scything of grasslands, small-scale tree planting and installation of further bird nest boxes.

In 2023, the expansion of NETPark led to large-scale land development to the west and north of the site around the William Armstrong Way. Works included hedge and mature tree clearance, new boundary fencing, extensive ground works and the installation of site offices. Works affecting the northwest corner of 'our' site included the removal of the planted 2021 hedgerow and an adjoining hedge line and integrating an area of rank grassland, herbage and saplings within the development zone.

Site Visits

Ten visits were carried out in March to June 2023. All were undertaken, where possible in the morning, when the site is less disturbed and to maximise the number of singing birds recorded.

VISIT LETTER	DATE	TIME	WEATHER	COVERAGE/COMMENTS
A	07.03.23	1230-1345	Sunny, Wind Nil. Cold 5C	Bird activity low. Site development work ongoing
В	18.03.23	0730-0900	Rain at start, then misty. Nil Wind, Mild 7-10C	Bird activity high
С	07.04.23	0700-0830	Cloudy, drizzle. Light NW Wind. Cold 5C	Low bird activity
D	16.04.23	0630-0800	Hazy sunshine, Wind Nil, 6-9C	High bird activity
E	30.04.23	0645-0830	Sunny, Light NE Wind, Cold 6-7C	High bird activity
F	11.05.23	1030-1230	Sunny, Light SW Wind Warm 12-14C	Moderate bird activity
G	18.05.23	0900-1130	Cloudy, Light SW Wind. Warm 14-16C	High bird activity
Н	25.05.23	0900-1100	Sunny, Wind Nil, Warm 14-16C	Moderate bird activity
J	3.06.23	0630-0800	Sunny. Wind Nil, Cold at first, 7-12C	High bird activity
К	11.06.23	0730-0900	Sunny. Wind Nil, Warm 14C	Moderate bird activity

The table above illustrates the 10 complete CBC visits made during the year – the same number as the previous two years. Visit weather conditions largely reflected the monthly UK weather data of a cold spell in March and early April, a relatively dry period and slightly below average hours of sunshine. May and June also reflected the national picture of relatively warm weather, with dry conditions continuing. The last survey visit was 11 June and this avoided the largely wet and unsettled summer weather then dominated most of the UK from July onwards. These conditions hopefully were too late to affect bird breeding attempts, although they may have had some impact of post-fledglings and available insect food.¹ A total of 17 hours fieldwork was carried out, a slight increase on the previous year.

¹ 'Seasonal Assessment – Spring 2023', Available at

https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-pastevents/summaries/uk_monthly_climate_summary_spring2m_2023.pdf; 'May 2023 Monthly Weather Report'. Available at:

Nestboxes

Early in 2023, a further 8 new boxes were installed on the site, bringing the total number of 'accessible' small nesting boxes to 24. In 2022, several boxes were damaged, most probably by Great Spotted Woodpecker or Grey Squirrel attempting to predate nesting occupants. Damaged boxes were repaired, and protective metal hole plates were added. There are also a small number of other 'tit' boxes on site, but because of their design it has proved impossible to check and maintain these boxes without damage. There are also 4 specialist 'large' boxes for Kestrel and Little Owl. These included 2 new boxes installed as habitat mitigation to replace removed potential nesting sites in the construction area.





Despite repair & protective plates, the boxes were still damaged by predators. New nestboxes in situ (Frederick Milton)

In the previous year, a check was made of the boxes to record usage. In 2023, this was not possible, however when the boxes were cleaned out in November, a record was made of usage. Of the 24 boxes inspected, 8 had been occupied by either Blue Tit or Great Tit, though it proved impossible to identify exact species from the check. Observation during the survey period showed that at least 3 boxes held Great Tit and another was used by Blue Tit. Whether all users had bred successfully, again it is difficult to say, however as one box again sustained predator damage and another held broken eggs, at least 2 titmice broods failed. To avoid disturbance the larger boxes were not checked, although Kestrel was seen using one of the boxes, and successful breeding was probable.

https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-pastevents/summaries/mwr_2023_05_for_print.pdf; 'Season Assessment – Summer 2023'. Available at: https://www.metoffice.gov.uk/binaries/content/assets/metofficegovuk/pdf/weather/learn-about/uk-pastevents/summaries/uk_monthly_climate_summary_summer_2023.pdf

Results of the 2023 Common Bird Census

A total of 51 bird species were recorded during the 2023 CBC. These included 5 new species for survey – Barn Owl, Willow Tit, Lesser Redpoll, Mealy Redpoll and Crossbill. Several wintering and spring passage birds were also recorded, including Redwing and Siskin. Overflying Gulls were not recorded.

Ducks to Woodpeckers

Mallard was noted on 2 dates, including a pair on the pond, but there was not insufficient evidence to suggest territory holding. Less disturbance of the pond and some habitat maintenance might tempt birds to breed. Two pairs of **Pheasant** held territory in the weedy fields on the site's northern boundary. **Stock Dove** was recorded twice, but no territory was proven. **Woodpigeon** numbers stayed level at 8 pairs spread across the site. **Collared Dove** was seen twice but did not hold territory. Overflying **Oystercatchers** were noted on several dates, piping loudly as they flew over.



Plenty of Ragwort (Senecio jacobaea) attracts huge numbers of invertebrates (Frederick Milton)

Two birds of prey were recorded. **Kestrel** and **Buzzard** held territory, with the former breeding in the Pine Wood. **Barn Owl** has not been recorded during survey fieldwork, despite it been regularly seen in 2021 and 2022 in the fields surrounding the site and also probably breeding in the same area. The NETPark expansion led to habitat loss, and despite the addition of mitigating nest boxes, the species was not seen in 2023. Sadly, a dead Barn Owl, probably a road casualty, was also found during the first survey visit in March. The owl corpse was sent for toxicology analysis to the Predatory Bird Monitoring Scheme and results are pending.

Great Spotted Woodpecker territories have been mapped in both 2021 and 2022, but the species was not recorded at all during the 2023 fieldwork. However, there was

probable evidence of the species on site as several nest boxes again sustained damage, despite metal hole plates on the boxes.

Crows to Warblers

Magpie numbers were constant at 4 pairs, with 2 active nests on site. **Rook** remains the commonest breeding bird at the site. For the third consecutive year there were 28 active nests in the Salters Lane Wood. **Carrion Crow** numbers have increased from 2 pairs in 2021, to 3 in 2022 and then to 4 pairs in 2023, with 2 active nests noted.



Willow Tit (Brian Clasper)

Coal Tit numbers remained static with a single pair in the Pine Wood. There was no evidence of the birds using the nest boxes, despite none of Pine Wood boxes being occupied by the more dominant Blue Tit and Great Tit. The abundant potential nesting sites in dead or dying mature Elder trees on the northeast border of the site are ideal **Willow Tit** habitat. The species excavates its own nest sites and the soft wood of Elder is a favourite. It was therefore pleasing that a Willow Tit territory, the first for the site, was mapped in this very locale. Willow Tit is the fastest declining resident bird species in the UK. Its population has declined by 86% between 1995 and 2020, though the Northeast remains a stronghold as the species favours 'brownfield sites', such as disused mineral lines, where mature Elder is relatively common.² **Blue Tit** numbers fell slightly to 8 pairs, whilst **Great Tit** numbers remained static at 6 pairs. Both species made use of the nest boxes, although, as previously discussed, exact occupancy and outcome was not recorded. After 2 **Long Tailed Tit** territories were mapped in 2022, it was disappointing that no territories were proven in 2023, with birds recorded on only 2 occasions.

² V. Amaral-Rogers (2022), 'Results from the National Willow Tit survey'. Available at https://community.rspb.org.uk/ourwork/b/science/posts/results-from-the-national-willow-tit-survey



Grasshopper Warbler (Brian Clasper)

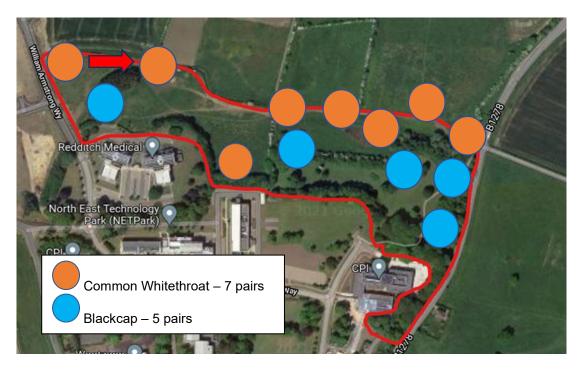
Remarkably, a single **Skylark** territory remained in the northwest border of the site, despite the ongoing construction works. The sight of a singing bird flying above the excavation works was quite poignant. Again, Swallow and House Martin were recorded, with the former probably breeding in the surrounding farmsteads and the latter in Sedgefield village. Warbler species had a good year. Willow Warbler returned as a territory holding species. A single pair were mapped around the central hedgerow and pond. Chiffchaff territories continued their remarkable upsurge. Just 2 pairs were recorded in 2021, but by 2023 this had increased to 6 pairs, with a pair in the Pine Wood, 2 in the centre of the site, and 3 pairs around Salters Lane Wood and adjacent hedgerows. After no territories were mapped in 2022, it was a surprise that 3 Sedge Warbler pairs were held in 2023 in the weedy field and hedgerow on the site's northern boundary. Grasshopper Warbler has been previously recorded on site in 2019, before census work began. It was another 'predicted' census bird, so it was gratifying to hear a bird 'reeling' in the weedy fields adjacent Hardwick Grange. The species is quite scarce in the UK, with just 12,000 territories estimated in 2016, following a rapid population decline from the 1960s to mid-1980s.³

Blackcap numbers increased slightly from 4 pairs in 2022 to 5 territories in 2023, with singing males in the mature tree woodlands and hedgerows. **Common Whitethroat** became the most common warbler on site, with 7 pairs mapped, Previously, all territories had been in the 'marginal' scrub hedgerow and weedy fields bordering the north of the site, and although this habitat remained the prime location for 6 pairs in 2023, a further pair was mapped in the older sapling areas in the centre of the site. Notably, the 'traditional' territory on the very northwest corner of the site held singing

³ British Trust for Ornithology, 'Grasshopper Warbler', *Bird Facts*. Available at:

^{&#}x27;https://www.bto.org/understanding-birds/birdfacts/grasshopper-warbler

birds in mid-May, but with onset of construction works, it was thought that this pair relocated to just outside the development area. The map below shows both Whitethroat and Blackcap distribution and their particular habitat preferences.



Crests to Buntings

For the third successive year a single **Goldcrest** pair was mapped in the Pine Wood. **Wren** retained its status as the second commonest bird on site, with another increase in numbers to a record 14 pairs. It would seem the ongoing spate of mild winters have contributed to the continuing rise in numbers. Another species affected by cold weather is **Treecreeper**, and whilst a single pair were mapped in the previous year, and birds were seen in 2023, a territory was unproven.

The 3 'common' thrush species again held territories. **Song Thrush** numbers increased from 4 pairs to 5 pairs and a single **Mistle Thrush** pair was also mapped, with probable successful breeding. Juvenile birds were seen in June in the Pine Wood. After maintaining a steady 12 territories since 2021, **Blackbird** numbers dipped slightly to 10 pairs spread across the site. Another 'steady' species, **Robin**, also dipped slightly from 7 pairs to 6 in 2023, with none using the boxes. After 2 pairs were mapped in 2022, it was disappointing that there were just 2 registrations of **Tree Sparrow**, despite the increase in nest boxes. In 2022, Tree Sparrows regularly visited the small feeding station, but this was not stocked in 2023. This lack of provided food, allied to the site development of adjacent fields may have contributed to the fall-off in numbers? More concerningly, there has also been comment of a noticeable and very recent decline in Tree Sparrow numbers in Yorkshire and Northumberland. The lack of birds at 'our' site may be part of this trend.



Wren is fairly easy to calculate territory holding as all the 2023 Wren registrations demonstrate. Circled letters indicate singing males. Not all species are this easy to analyse. (Frederick Milton)

Dunnock numbers have remained constant over the 3 years of the survey, with 8 pairs mapped in the 'hedgerow' habitats. Another 'unchanging' species is **Pied Wagtail.** A single pair held territory, with breeding likely in one of the bordering industrial units. Finch species had a mixed year. **Chaffinch** numbers remained at 8 territories, despite a noticeable lack of singing males. **Bullfinch** also remained static. Two pairs were mapped in the Pine Wood and central hedgerows. Greenfinch dropped back to their 'marginal' status, with just 2 registrations. It is likely that birds breed in the surrounding NETPark site, where they favour the 'parkland' habitat. Linnet numbers remained stable at 2 pairs, with birds probably breeding along the 'scrubby' northern boundary. On the second survey visit in late March a flock of 48 Lesser Redpoll were seen feeding in the birch and weeds in the northeast corner of the site. Previously relatively common in the UK until the 1970s, the species has undergone a rapid population decline (89% fall from 1967 to 2020) to the extent it is now a 'red listed' bird of conservation concern.⁴ The 'Redpoll' family includes several very closely related species, which until recently have been regarded as 'sub-species'. Observing 'our' flock, 2 **Common** or '**Mealy' Redpoll** were also seen. These are slightly larger and paler birds than Lesser Redpoll and were probably migrants from northern Europe. This Redpoll flock was a 'one off' sighting as the birds could not be located later that day and there were no further Redpoll records during the survey.

⁴ Massimino, D., Woodward, I.D., Hammond, M.J., Barber, L., Barimore, C., Harris, S.J., Leech, D.I., Noble, D.G., Walker, R.H., Baillie, S.R. & Robinson, R.A. (2022) 'BirdTrends 2021: trends in numbers, breeding success and survival for UK breeding bird. *BTO Research Report* 732. BTO, Thetford. www.bto.org/birdtrends



Lesser Redpoll (Brian Clasper)

Another new species in 2023 was **Crossbill**. Three calling birds were seen flying over the site in early June. Crossbills are birds of coniferous woodland and most likely breed at Wynyard. **Goldfinch** numbers halved to just 3 pairs. This may have been a result of the site development as the species was regularly recorded feeding on thistles in the northwest corner. Another species impacted by the development was **Yellowhammer**, as it traditionally held territory in the same area. Although Yellowhammer was recorded, there was insufficient evidence to confirm territory holding. **Reed Bunting** is another 'steady' species – for the past 3 years a pair have been mapped in the northern hedgerow and reedbeds of the pond.

Summary

The development of the northwest corner of the site caused some habitat loss, and probably led to the loss of Yellowhammer as a territory holder and may have contributed to a falloff in Goldfinch and Tree Sparrow numbers. The level of construction disturbance may have also impacted upon nest box usage in the Pine Wood. Whilst several new species were seen in 2023, underlining the site's continuing potential, the number of birds holding territory fell from 33 species in the previous year to 29 species, although these birds were generally 'marginal' single territory holders such as Greenfinch and Great Spotted Woodpecker. The total numbers of birds also dropped, although this was just a loss of 4 to 149 pairs and the general population trend is still upward, with 139 pairs mapped in 2021. There were certainly some positives in 2023, most notably with regards to Warblers; Whitethroat, Chiffchaff and Sedge Warbler all reached record numbers, Blackcap increased, Willow Warbler returned, and a Grasshopper Warbler was singing. For three of these species, it again

underlines the importance of the rank vegetation and fragmented hedgerows on the northern borders of our site. Other positives include record numbers of Wren and the number of species who show stable or low fluctuating populations, include Rook, Dunnock, Goldcrest, Bullfinch and the UK-vulnerable Song Thrush and Reed Bunting.

Remarkably, given its linear profile, relatively small size, and fragmented habitat, as well as its heavy daily footfall, as this census work continues to show, Sedgefield Woodland and Wildlife Community Woodland remains home to an abundant variety of birds. This survey plays a vital role in support the future of the site and its ongoing management and preservation as an asset for Sedgefield.

Acknowledgments

The members of the Woodland group and everyone else who have contributed to the site are recognised for their hard work in creating a superb wildlife habitat in Sedgefield for everyone to enjoy. Thank you also to Brian Clasper for kindly allowing use of his brilliant bird images.

References

Electronic resources

- <u>https://blog.metoffice.gov.uk/</u>
- https://www.metoffice.gov.uk/
- <u>https://www.sedgefieldweb.co.uk/woodland-wildlife.html</u>
- Woodland & Wildlife Sedgefield Facebook site

Journals & Reports

- Amaral-Rogers, V., (2022), 'Results from the National Willow Tit survey'. Available at <u>https://community.rspb.org.uk/ourwork/b/science/posts/results-from-the-national-willow-tit-survey</u>
- British Trust for Ornithology, 'Grasshopper Warbler', *Bird Facts*. Available at: 'https://www.bto.org/understanding-birds/birdfacts/grasshopper-warbler Massimino, D., Woodward, I.D., Hammond, M.J., Barber, L., Barimore, C., Harris, S.J., Leech, D.I., Noble, D.G., Walker, R.H., Baillie, S.R. & Robinson, R.A. (2022) 'BirdTrends 2021: trends in numbers, breeding success and survival for UK breeding birds', *BTO Research Report* 732. BTO, Thetford. Available at: www.bto.org/birdtrends
- Woodward, I.D. *et al.* (2020), 'BirdTrends 2020: trends in numbers, breeding success and survival for UK breeding birds', *BTO Research Report*, 732. Available at <u>www.bto.org/birdtrends</u>

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