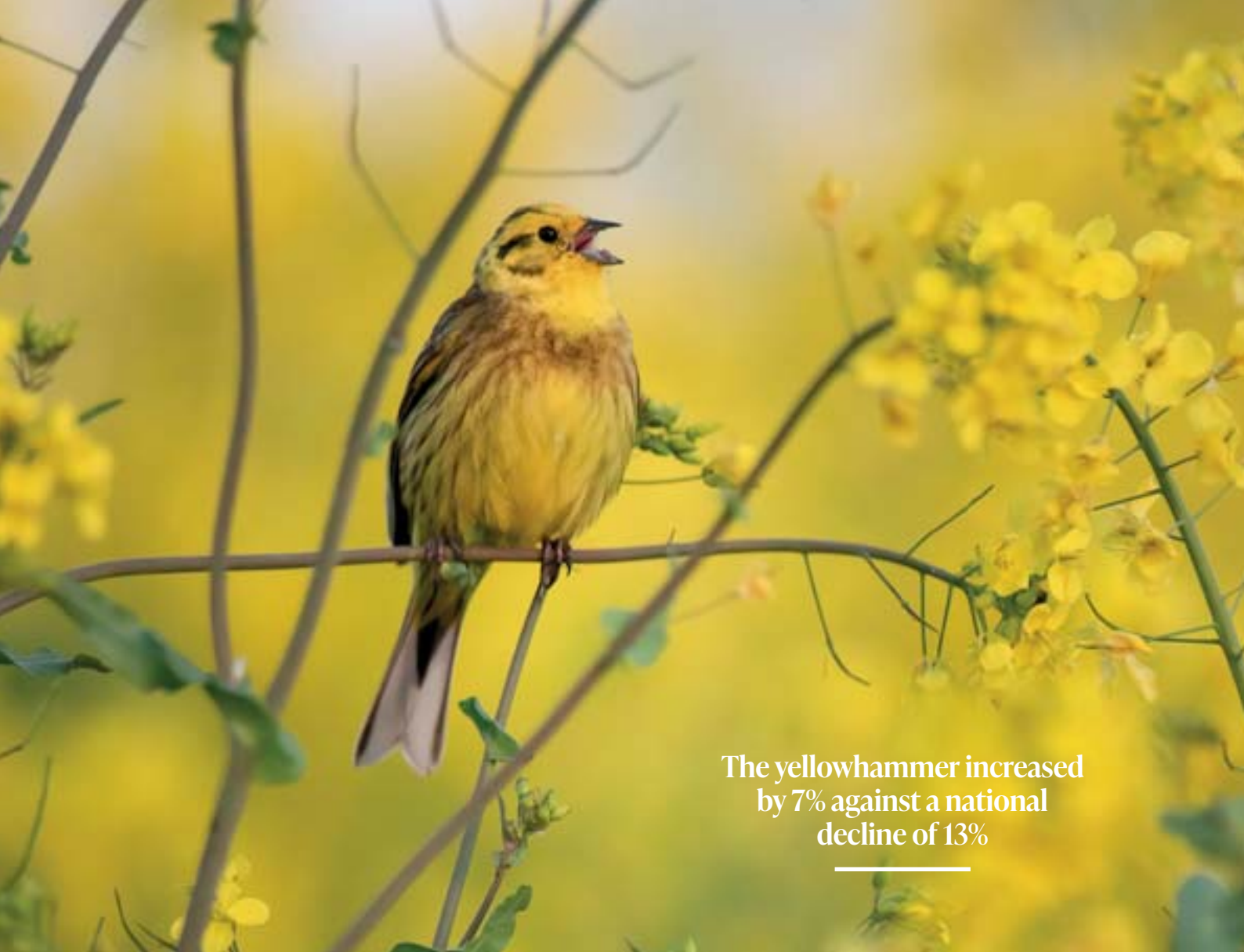




Counting the
farmland birds
flying high
once more

Francis Buner looks at the success of farmland bird recovery
on the Rotherfield Park Estate



The yellowhammer increased
by 7% against a national
decline of 13%

This year marks the end of 13 years of bird monitoring on roughly 500 hectares (ha) of the Rotherfield Park Estate, as part of the GWCT Rotherfield Demonstration Project (2010-2020) and the PARTRIDGE North Sea Region Interreg Project (2016-2023). One of the key aims of both projects was to re-establish the red-listed grey partridge as a breeding bird in the area and then further increase its numbers. Simultaneously, both projects demonstrated how a wide range of species, in particular farmland birds, benefited from the management measures targeted at grey partridge conservation.

As with many other GWCT-led projects, the overall management strategy was based on the three-legged stool principle: good habitat, legal predation management and supplementary winter feeding. Arguably the most important of these three legs is the provision of high-quality habitat, because without it, the other two cannot deliver their added benefits. But what does high-quality habitat mean? At the Rotherfield Park Estate it meant an increase from approximately 10% wildlife-friendly habitat across the farmed area in 2010, to 18% by 2023. This happened because of the owner's passion for the grey partridge, the entry into a well-planned Natural England

Agri-environment Scheme (AES) in 2010, together with professional advice from GWCT scientists and advisors. The implemented habitat package was well-balanced and included beetle banks, wild bird seed mixes (from 2017 onwards these were all converted into advanced PARTRIDGE mixes – see page 37), cultivated uncropped margins, pollen and nectar mixes, flower-rich grass margins, extended overwintered stubbles and wildlife-friendly hedgerow management. You can read about these measures in more detail by visiting our story map: gwct.org.uk/rotherfieldmap.

To monitor project progress, we conducted annual breeding bird surveys between April-June, spring and autumn gamebird counts, nocturnal hare and owl surveys from 2017-2023, and several winter bird surveys with the help of a consultant. The total number of birds recorded during this time was an impressive 101 different species, of which 56 were regular breeders (15 of which are UK red-listed and 11 amber-listed), 10 irregular breeders, 20 passing migrants and 15 wintering guests. For an English lowland mixed farm these are quite remarkable numbers.

Given the project's focus on the grey partridge, it is particularly interesting to look at how well the grey partridge and other farmland birds more generally have

(Above) Red-listed birds, such as yellowhammers, all benefited from management targeted at grey partridge conservation.
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Francis Buner is our head of lowland wildlife recovery and is keen to show how farmland bird recovery is achievable.



Arguably even more impressive is the recovery of several other UK red-listed farmland birds during the project period, a direct result of the grey partridge’s ability to act as an umbrella species

(Above) The linnets, increased by 114% against a national trend of only +4% (2010-2020, BTO bird trends); charms of goldfinches are regularly seen feeding on teasels in the PARTRIDGE flower plots; the grey partridge population remained small but stable during the 10-year project period after reintroduction.

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fares during the project’s lifespan. The grey partridge was reintroduced on the Rotherfield Park Estate using GWCT’s best practice guidelines between 2004 and 2012, after the last wild partridges were recorded in the mid-1990s. Since 2013, the average number of spring pairs was 18, and the average number of individuals in autumn was 73, with autumn stocks reaching 100 or more in 2014, 2017 and 2018. These numbers may seem low to some readers, but in the context they make perfect sense as the area is only semi-optimal for grey partridge, owing to the relatively high proportion of woodland and complete isolation from the nearest wild grey partridge population. Nevertheless, the small grey partridge population remained stable during the 10-year period after reintroduction, which makes it the first documented

case in the UK (and almost certainly in Europe), where the species has been re-established successfully from zero.

Arguably even more impressive is the recovery of several other UK red-listed farmland birds during the project period, a direct result of the grey partridge’s ability to act as an umbrella species. Notably the linnets, which increased by 114% against a national trend of only +4% (2010-2020, BTO bird trends) during almost the same period. The whitethroat increased by 68%, while nationally it decreased by 10%. The skylark increased by 34% (+3% across Britain) and the yellowhammer increased by 7% against a national decline of 13%. Another regular, red-listed breeder was the lapwing with an average of 10 nesting pairs per year, which is more than anywhere else in east Hampshire.

Wildlife friendly habitat, such as cultivated uncropped margins, accounts for 18% of the 500-ha farmland project area.



If all UK arable farmland went through a transformation like the Rotherfield Park Estate did during the GWCT's involvement, the national decline of farmland birds could be halted or even reversed for most species



(L-R) Skylark numbers increased by 34% and whitethroat by 68%.
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Habitat for partridges

The advanced PARTRIDGE mix is a variant of the more commonly known wild bird seed mix, with the difference being that it can last up to 10 years and provide year-round habitat for a wide range of farmland wildlife. It can be created by planting a strip of minimum 15 metres wide (to avoid becoming a predator trap), or as a 0.5ha to 1-ha block. The mix contains between 20-30 different plant species, most of which are native flowers. In its first year, the mix provides foraging cover including arable annual flora such as poppies, cornflowers and corn cockle, and sunflower, triticale, millet and kale for winter cover. From the second year onwards, the native perennial flowers, together with sweet fennel, chicory and perennial rye provide pollen and nectar for insects from ground level up the entire vertical structure, from early spring to late autumn. At this stage the plots also provide suitable nesting habitat for grey partridge, whitethroat, skylark, corn bunting, quail and many others, a winter food source for seed eating farmland birds, and year-round habitat for mice, voles and shrews, which in turn render the plots favoured hunting habitats for kestrels, barn owls and long-eared owls. We recommend a rotational approach to management, whereby from year two, maximum half of the plot is re-established, typically by mowing in autumn and top-soil cultivation in the following early spring. If well established at the beginning, the plot will not need resowing, but instead will regenerate itself.

Other interesting observations include the woodlark, with one pair recorded breeding irregularly (ie. not every year) until 2018, but breeding annually with slowly increasing numbers since 2019, reaching four pairs in 2022. A new breeder altogether was the stonechat (one to two pairs since 2019), previously only recorded as a winter guest or passing migrant.

Anecdotal highlights include a singing icterine warbler in spring 2018 and a singing corn bunting in 2021, although neither stayed on for the breeding season. Singing quail were recorded in 2010 and again in 2022. During most winters, at least one hen harrier could regularly be observed hunting the strips and blocks of wild bird seed mixes, and one winter a great grey shrike was present for several weeks. A further highlight is the presence of all UK owls, with barn owl, tawny owl and little owl breeding regularly, and short-eared owl and long-eared owl recorded as regular winter guests, especially in the area with the highest amount of advanced PARTRIDGE mixes. The area also hosts the

highest known number of wintering woodcock in Hampshire, as well as a very healthy local breeding population.

Overall, I think it is fair to say that if all UK arable farmland went through a transformation like the Rotherfield Park Estate did during the GWCT's involvement, the national decline of farmland birds could be halted or even reversed for most species. ■

MORE INFORMATION

Why not try our grey partridge or farmland bird conservation package on your own farm or better, across a Farmer Cluster? Unsure how to do it? Contact us to receive tailored professional advice to help you recover your local farmland wildlife. Email Francis Buner fbuner@gwct.org.uk or contact our advisory team by email advisory@gwct.org.uk or ring 01425 651013.