

Woodpigeon *Columba palumbus*

Legislation

Woodpigeon *Columba palumbus* is currently not listed on Schedule 2 Part 1 of the Wildlife and Countryside Act, as amended, 1981 (“the Act”). As a wild bird, the Woodpigeon is fully protected at all times by the provisions of section 1 of the 1981 Act. It is, therefore, unlawful to kill or take Woodpigeons except in circumstances where that protection is derogated. Woodpigeon can be lethally controlled under General Licence 001 for two specific purposes; prevent serious damage to crops, vegetables or fruit; and/or prevent the spread of disease to livestock or livestock foodstuffs.

Conservation status

IUCN Red List			Birds of Conservation Concern (BoCC)				
Global	Europe	GB	BoCC UK	BoCC Wales			
LC	LC	LC	2022	2002	2010	2016	2023

BoCC 5 UK status: **AMBER** based on the international importance (ie the UK holds at least 20% of the European population) of the breeding population (Stanbury *et al.*, 2021).

BoCC 4 Wales status: **GREEN** (Johnstone *et al.*, 2022).

IUCN GB status: **LEAST CONCERN** – Both breeding population and non-breeding populations are considered to be of **LEAST CONCERN** (Stanbury *et al.*, 2021)

Population status (abundance and distribution)	<p>GB: 5,050,000 (4,750,000–5,350,000) breeding pairs in 2016 (Woodward <i>et al.</i>, 2020).</p> <p>UK: 5,150,000 (4,850,000–5,450,000) breeding pairs estimated in 2016 (Woodward <i>et al.</i>, 2020).</p> <p>Wales: 295,000 breeding pairs (280,000-315,000) in 2020 (Hughes <i>et al.</i>, 2020)</p> <p>Woodpigeon are found throughout Britain, with the exception of areas with little to no woodland cover such as the higher mountain zones of Scotland and some northern and western islands. Densities tend to be highest in the lowland areas with higher amounts of arable land (e.g. eastern lowland England) (Harris <i>et al.</i>, 2022).</p> <p>The species is found throughout Wales, occurring in over 97% of 10km squares (Pritchard <i>et al.</i>, 2021). There has been no change in the distribution of Woodpigeon in Wales between the three atlas periods (Balmer <i>et al.</i>, 2013). There appears to be no conservation concern about the UK or Welsh Woodpigeon populations, despite large numbers being shot each year.</p>
---	--

<p>Population trends</p>	<p><i>Breeding in the UK</i></p> <p>Following a period of rapid increase between 1995-2010, the breeding population of Woodpigeon decreased and has now shown a marked increase, with the BBS UK index showing a 33% increase between 1995-2020 (Fig1a.) and a slight decline of -5% between 2010-2020 (Harris <i>et al.</i>, 2022). Since 1967 the breeding population has increased by 158%.</p> <p><i>Breeding in Wales</i></p> <p>In Wales, the species' long-term trend was similar to the UK, with a peak in population abundance in 2010 (Fig1b). The long-term trend shows a 20% increase between 1995-2020, and a shorter-term trend of -11% between 2011-2020 (Harris <i>et al.</i>, 2022).</p>

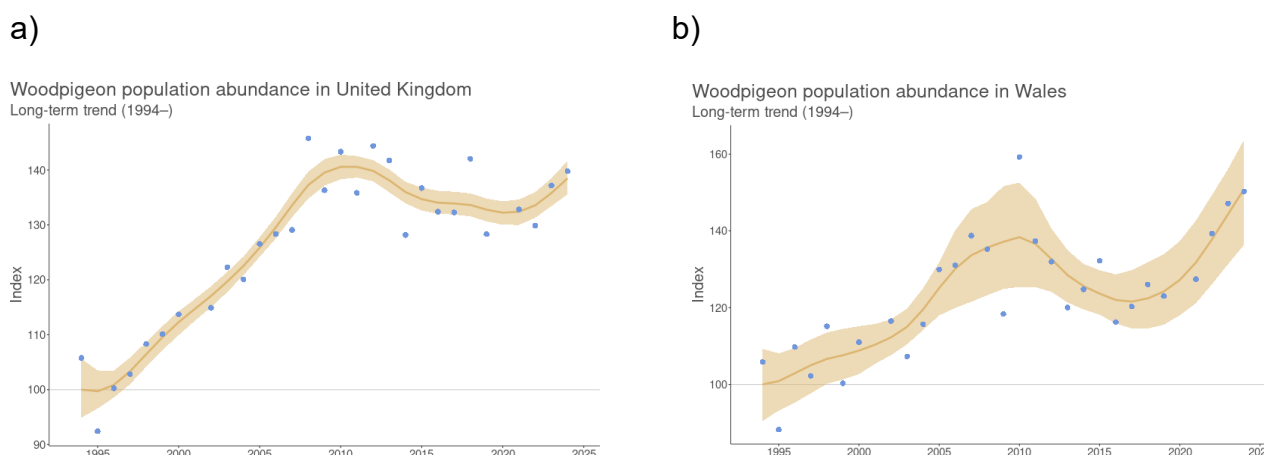


Fig.1a-b. Long-term (1994 onwards) Breeding Bird Survey trend for Woodpigeon in a) United Kingdom and b) Wales. The smoothed trend line shows how the number of birds has changed through time. The shaded area shows uncertainty around the trend line (based on 85% confidence limits) and values for individual years are shown as dots.

Ecology

Habitat and diet

Woodpigeon typically inhabit both, deciduous or coniferous woodland habitats, fringing or penetrated by well-vegetated open spaces. Although Woodpigeons in Wales are also closely associated with farmed landscapes, particularly arable. The species nests and roosts in woodland and hedges/isolated tress, and forages in on open land in the farmed and built environments. Woodpigeons tend to avoid bare rocky mountain areas, densely vegetated wetlands, treeless landscapes and exposed coasts.

Woodpigeon diet comprises mainly plant material: green leaves, seeds, berries, buds, flower and root crops. Occasionally, invertebrates. They are widely regarded as an avian pest of arable farmland.

Breeding

Woodpigeons have a very long breeding season and have actually been recorded nesting in every month of the year (BTO, 2026). The median date of first clutch is 30th April with a range of 22nd February – 20th August (BTO, 2026). Birds typically have one-two broods annually. The Breeding Bird Survey (BBS) UK map of change in relative density between 1994-96 and 2007-09 indicates that increase has been very widespread, with decreases only in parts of northeastern Scotland (BTO, 2026).

The species appears to be readily able to adapt the timing of breeding according to food availability. O'Connor and Shrubbs (1986) found that the breeding season had advanced in response to the switch from spring to autumn sowing (and thus earlier ripening) of cereals, with more pairs nesting in May and June, and relatively fewer during July-September. Climate change may have also permitted earlier nesting. However, more recent data indicate that the species is now nesting almost three weeks later, on average, than it did in the 1960s (BTO, 2026).

Migratory behaviour and movements

The British population is largely resident and non-migratory with the vast majority of birds ringed in Britain have been recovered in Britain (the few foreign recoveries have mostly been in northern France, Wernham *et al.*, 2002). There is some immigration from Europe, but its relevance to population status is likely to be small (BTO 2023). Late autumn movements, from late October through to late November), of large flocks have been recorded, although their destinations are less clear. Based on ringing recoveries Figure 2 highlights the movements of Woodpigeon in northern and central Europe.

Similarly in Wales, late autumn movements can be considerable, particularly in southeast Wales (Pritchard *et al.*, 2021). For example, in 2024, Hughs (2025) reports an autumnal flock of 231,310 birds flying over Portskewett, Gwent.

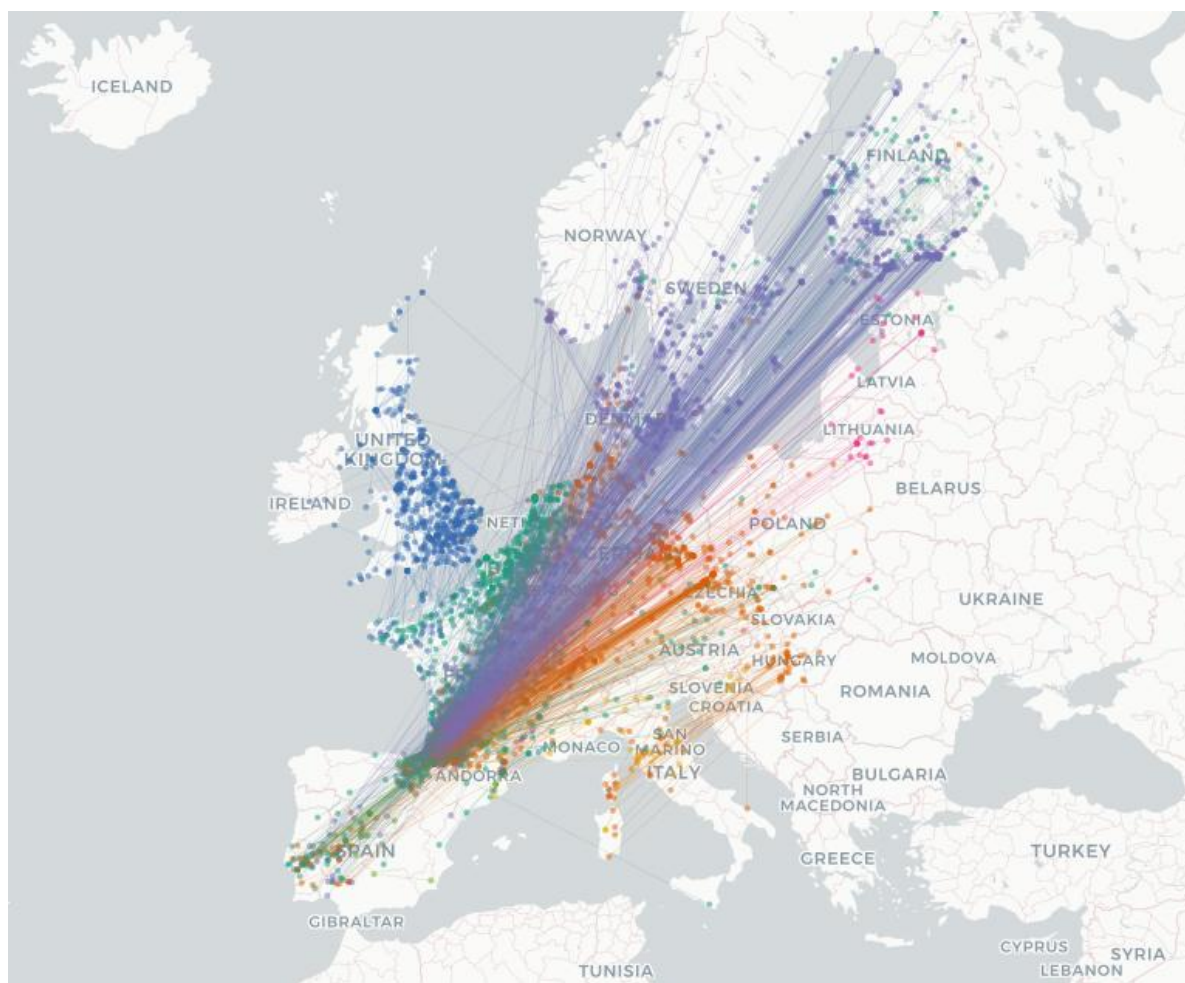


Figure 2. Movements of Woodpigeon in northern Europe based on ringing recoveries. (Spina *et al.*, 2022).

Site designation for breeding and wintering Woodpigeon

In Wales, there are no SPAs classified for either breeding or non-breeding Woodpigeon. There are no SSSIs in Wales with breeding or non-breeding Woodpigeon as a feature or part of an assemblage.

Drivers of population change

Land use change and modification

Given the widespread, common nature, of Woodpigeon it might be surprising that there are relatively few studies that have specifically examined demographic and ecological drivers of long-term increase in this species. The increase and spread of intensive arable cultivation may explain the rise in numbers where increases in both oil-seed rape and winter-sown cereal have been shown to influence population size and reduce overwinter mortality (Inglis *et al.*, 1997). However, in Wales the farmed landscape is predominantly pastoral agriculture, with arable representing 3% of farmed. Furthermore, land cultivation of oil-seed rape is not widespread in Wales. Pritchard *et al.* (2021) suggested Woodpegeons have occupied a niche in suburban and urban environments, where living in close association with people may reduce predation risk. Although it is unclear whether this is the result of wider countryside increases or from the increase of urban feeding, or a combination of both.

Coupled with an increase in overwinter survival and the number of young fledged these two demographic metrics maybe driving increasing Woodpigeon population size (Inglis *et al.*, 1997). Woodpigeons may also have benefited from conservation actions aimed at declining farmland birds, that increase winter seed availability.

The BTO (2023) provides an overview of likely drivers for the increase in Woodpigeon.

Climate change

An analysis of climate change impacts indicates that Woodpigeon populations may benefit (Pearce-Higgins, 2021). Here, population resilience to climate change may reflect the species generalist ecological needs including accessibility and utilisation of a range of habitats. Peak breeding period is expected to move forward in the year, and it may extend further, if food availability permits.

Evidence gaps:

- Breeding demographic information, particularly hatching success and fledging success and age of breeding population.
- The relative strengths of the influences between broad-scale factors (e.g. climate change) and local on-site influences (e.g. feeding and shifts in breeding periods), and how these interact.

Impact of hunting on Woodpigeon populations

The National Gamebag Census (NGC) collated by the Game and Wildlife Conservation Trust has been collecting voluntary bag returns from shoots across the UK since 1961. Methods similar to the ones used for bird census data are applied to NGC data to derive annual bag indices for the UK, assess temporal trends and evaluate changes in bags over 50, 25 and 12 years (Aebischer, 2019). Total UK bags and numbers released in the 2004 and 2012 seasons are obtained by splitting up aggregate bags from two independent surveys (PACEC, [2006](#), PACEC, [2014](#)) in relation to their NGC species composition.

In the absence of mandatory reporting of hunting, the scale of hunting is based on an analysis of gamebag records voluntarily contributed to the National Gamebag Census. These bag records have been adjusted to provide national estimates using independent surveys of recreational hunting activity (see Aebischer, 2019). This methodology may underestimate numbers killed as the surveys used to extrapolate the sample of bag records to a national hunting bag report the numbers killed by 'shooting sports participants' (i.e. predominantly unpaid participants in recreational shooting) is likely to underestimate the contribution of people involved in wildlife management as part of their employment or livelihood, such as gamekeepers or farmers.

National Gamebag Census records show a long-term upward trend in Woodpigeon shooting (+55%, 95% CI 8 – 120% between 1966 and 2016) with relative stability between 2004-2016 (Fig. 1). This pattern is like the trend in population, but slightly delayed and most likely reflects changes in Woodpigeon abundance.

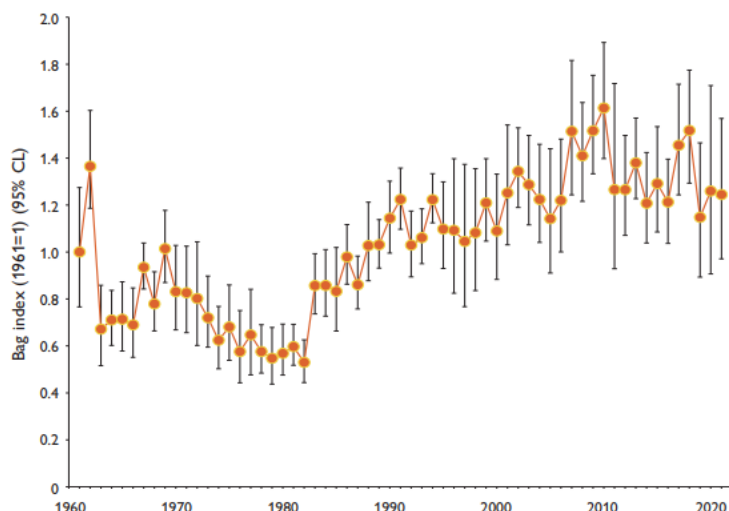


Figure 1 Index of the numbers of woodpigeon shot per square kilometre in the UK, 1961-2021 (Data source Game & Wildlife Conservation Trust Annual Review, 2022).

Due to recent breeding population declines in continental Europe as well as poor UK breeding and harvest data, Ellis and Cameron (2022) used a demographic invariant method (**DIM**) to estimate potential excess growth (**PEG**) for populations of UK wintering waterbirds and calculated a sustainable harvest index (**SHI**) for each species. Comparing this with population trends they assessed the sustainability of harvests. These authors collated mean and confidence intervals for harvest estimates, population size estimates and demographic data, and also population trends on huntable ducks, geese and waders in the UK. Using the mean and Confidence Intervals (**CI**) of SHI estimates, they estimated how probable it is that a current harvest is unsustainable. For Woodpigeon, the threshold for sustainability was set at 50% of the maximum potential surplus of the current winter population size, the mean sustainable harvest index was 0.392 (95% CI 0.133–0.763) and gave a probability value of an unsustainable harvest of zero. Ellis and Cameron (2022) concluded Woodpigeon are not being overharvested and the current take is sustainable.

The number of Woodpigeons shot in the UK in 2016 has been estimated at 1,900,000 (95% confidence limits 1,400,000-2,600,000; Aebischer, 2019). As shown by the Confidence Intervals **CIs** presented by Aebischer (2019), the accuracy of the current UK Woodpigeon harvest estimates provides moderate scientific certainty (Table 2). However, for reasons that are unclear, for 2016 the level of certainty of the numbers of birds shot, based on the relatively wide CIs, is weak. On the basis of scientific uncertainty, it is important to develop an accurate harvest recording system for the UK, which will assist with management decisions at the population or flyway scale. There is no breakdown of the numbers of birds shot in Wales.

Table 2. Estimated number of Woodpigeon that are shot in the UK with 95% Confidence Intervals (CI) in brackets (redrawn from Aebischer, 2019).

Year	Number of birds shot (95% CI)
2004	3,600,000 (3,200,000-4,000,000)
2012	1,100,000 (990,000-1,200,000)
2016	1,900,000 (1,400,000-2,600,000)

Are hunters shooting Woodpigeon (i.e. native breeding population) that are in decline and need of protecting?

Any Woodpigeon shot in Wales would likely originate from the native breeding population. The Woodpigeon population has undergone a marked increase, and the species is BoCC Green listed in Wales and not considered to be of conservation concern, despite the level of hunting pressure.

What proportion of shot Woodpigeon enter the human food chain?

There is not available data on the number of Woodpigeon sold for food in the UK or indeed Wales. However, Woodpigeon is a popular game meat and is available from many larger supermarkets, butchers, game dealers (including online) and frequently offered in restaurants. Currently, the only domestic source of Woodpigeons for human consumption is derived from shooting under the authority of general licences. It is therefore likely that a relative high proportion of birds that are shot may enter the food chain.

What is the economic value of shooting Woodpigeon

The economic value of Woodpigeon shooting is uncertain. PACEC (2014) stated that 54% of shooters surveyed shot woodpigeons and 'other avian pests' and during the survey period (August 2012 – July 2013) this accounted for 510,000 days-worth of shooting. The report gives a total gross value added financial benefit for shooting as a whole. Allocated on a simple pro rata basis according to days of shooting, the shooting of Woodpigeon and other avian pests is worth approximately £93 million. Recreational Woodpigeon shooting is expected to provide an economic benefit to farmers through its contribution to the management of Woodpigeon populations (Fera, 2010). Here, the level of damage to crops caused by Woodpigeon was estimated to be widespread and 'major' (defined as between £1-10 million pa) but mostly limited to January – March, when alternative food resources are (Fera 2010).

Is there supporting evidence to suggest shooting/hunting might bring benefits to the species

No evidence can be found that shooting or hunting may bring conservation benefits to Woodpigeon. Unlike game and wildfowl shooting, habitat is not managed, and lethal predator control is undertaken to encourage the growth of Woodpigeon populations.

Would any amendment to Schedule 2 have any deleterious effects of on the species

The effect of shooting and lethal control on Woodpigeon populations in the UK or Wales has not been studied in detail but there is no evidence to suggest that current levels of shooting are having a negative impact on the species (Pritchard *et al.*, 2021). Indeed, it is likely that the current estimates of the numbers shot is an underestimate (Aebischer 2019). The recent change from Green to Amber listing in the fifth UK Birds of Conservation Concern assessment reflects the international importance of the UK population, rather than any decline in the favourable status of the UK population (Stanbury *et al.*, 2021).

The shooting of Woodpigeons during the breeding season will have adverse welfare consequences for their dependent young. Though, this is an unavoidable outcome of control currently undertaken under licence to prevent serious damage to crops, it could be avoidable where the primary motivation of shooting would be recreation and / or exploitation for commercial sale. For example, such a legislative change may reduce the level of shooting

during peak period of breeding season and through doing so have a positive effect on animal welfare by reducing the number of adult birds killed with dependent young.

Although there are no population status concerns about the current scale of shooting on abundance or distribution of wood pigeon (see Aebischer, 2019), the introduction of a close season provides a means to protect pigeon populations, if at any time in the future this becomes necessary, by altering the conditions of licences. This change therefore provides a safeguard that can be employed to ensure shooting remains sustainable in the long-term.

What is the rationale for reviewing Woodpigeon to be added to Schedule 2?

This review of adding Woodpigeon to Schedule 2 has been undertaken on the following basis:

- In the UK Woodpigeons are shot in large numbers, perhaps as many as two million annually (Aebischer, 2019), though it is not clear how many birds are shot under general licence in Wales. Shooting is motivated principally by a need to manage damage caused by pigeons to agricultural interests.
- The law makes no provision for people to lawfully hunt wood pigeon for recreational or harvesting purposes even though hunting is a popular, widely practiced pursuit that is supported by government policy and within international law.
- People wanting to hunt can do so legally only if they comply with the terms and conditions of a general licence issued to prevent serious damage to crops, fruit, vegetables and feedstuffs for livestock and to prevent the spread of disease in livestock.
- The general licence relied upon by hunters allows control and, in practice, this encourages or, at least, facilitates recreational hunting during the Woodpigeon's breeding season. This may be viewed favourably by (some) hunters but hunting at this time leads to adverse welfare outcomes when parent birds with dependent young in the nest are killed.

Options

1. Maintain the Woodpigeons current status of non-listing under Schedule 2, with lethal control only permitted under general licence.
2. Consider adding Woodpigeon to Schedule 2 Part I of the Wildlife and Countryside Act 1981 ("the 1981 Act") with a close season period introduced covering its main reproductive period between 1st February to 31st August. This provides an open season of five months (1st September to 31st January).

Any control that is necessary to manage serious damage and other problems during the closed season would continue to be derogated by way of appropriate general licences.

Recommendations

- R1. NRW advise consideration to Option 2, based on the estimate of current take having no adverse impact on the population. Efforts to develop a bespoke**

period would benefit from an improved understanding of current breeding behaviour. To this end, it is recommended that the British Trust for Ornithology is commissioned to review nest record scheme data. It may also be helpful to invite stakeholders to contribute any other relevant evidence that they hold.

- R2. Invest in improved monitoring of the size and spatial and temporal distribution of the hunting bag, to help with future decision-making concerned with managing/mitigating any impacts of shooting on the species.**

References

- Aebischer, N.J.** 2019. Fifty-year trends in UK hunting bags of birds and mammals, and calibrated estimation of national bag size, using GWCT's National Gamebag Census. (2019) *Eur. J Wildl Res* **65**, 64.
- Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. and Fuller, R.J.** 2013. *Bird Atlas 2007-11: the breeding and wintering birds of Britain and Ireland*. Thetford.
- BTO.** 2026. Bird facts – Woodpigeon. Accessed 2026.
- Ellis, M.B. and Cameron, T.C.** 2022. An initial assessment of the sustainability of waterbird harvest in the United Kingdom. *J Appl Ecol.* 59: 2839–2848.
- FERA.** 2010. Overview of conflicts between human and wildlife interests in the UK. A report to Defra. December 2009.
- GWCT.** 2022. Review of 2022: A full report of the activities of the Game and Wildlife Conservation Trust.
- Harris, S.J., Massimino, D., Balmer, D.E., Kelly, L., Noble, D.G., Pearce-Higgins, J.W., Woodcock, P., Wotton, S. and Gillings, S.** 2022. The Breeding Bird Survey 2021. BTO Research Report 745. British Trust for Ornithology, Thetford.
- Hughs, J.** 2025. Welsh Bird Report 2025. *Milvus* vol 4(3): 56
- Hughes, J., Spence, I.M. and Gillings, S.** 2020. Estimating the sizes of breeding populations of birds in Wales. *Birds in Wales* 13(1): 56-67.
- Inglis, I.R., Isaacson, A.J., Smith, G.C., Haynes, P.J. and Theale, R.J.P.** 1997. The effects of Woodpigeon (*Columba palumbus*) of the introduction of oilseed rape into Britain. *Agriculture, Ecosystems & Environment.* 61:2-3, 113-121.
- Johnstone, I.G., Hughes, J., Balmer, D., Brenchley, A., Facey, R.J., Lindley, P., Noble, D.G. and Taylor, R.C.** 2022. Birds of Conservation Concern Wales 4: the population status of birds in Wales. *Milvus* 2:1 (online).
- O'Connor, R.J and Shrubbs, M.** 1986. *Farming and birds*. Cambridge University Press, Cambridge.
- PACEC.** 2006. The economic and environmental impact of sporting shooting in the UK. Public and Corporate Economic Consultants, London.
- PACEC.** 2014. The value of shooting: the economic, environmental and social benefits of shooting sports in the UK. Public and Corporate Economic Consultants, Cambridge
- Pritchard, R., Hughes, J., Spence, I.M, Haycock, B. and Brenchley, A. (eds).** 2021. *The Birds of Wales Adar Cymru*. Liverpool University Press.
- Spina, F., Baillie, S.R, Bairlein, F, Fiedler, W. and Thorup, K. (Eds) 2022.** The Eurasian African Bird Migration Atlas. <https://migrationatlas.org>. EURING/CMS.
- Stanbury, A.J., Eaton, M.A., Aebischer, N.J., Balmer, D., Brown, A.F., Douse, A., Lindley, P., McCulloch, N., Noble, D.G. & Win, I.** 2021. The Status of our bird

populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of man and second IUCN assessment of extinction risk for Great Britain. British Birds 114: 723-747.

Wernham, C., Toms, M., Marchant, J.H., Clark, J., Siriwardena, G. and Baillie, S.R. 2002. [The Migration Atlas: Movements of the Birds of Britain and Ireland](#). British Trust for Ornithology [Link to publication](#)

Woodward, I., Aebischer, N., Burnell, D., Eaton, M., Frost, T., Hall, C., Stroud, D.A. and Noble, D. 2020. Population estimates of birds in Great Britain and the United Kingdom. British Birds 113: 69–104.