

Where have all our songbirds gone? Conservation of our farmland birds and other wildlife

With the pressure on farmers to make a profit and produce food in great quantities, the countryside has become an increasingly efficient and intensive landscape. Whilst the drive to produce so much across our rural landscape means we have plenty of food to buy and eat, there are many organisms that are losing out. Many of our insects such as bees and butterflies are disappearing and farmland birds, which rely on insects during the summer and seeds during the winter, have increasingly less food to eat. Students have the opportunity to use the Museum of English Rural Life to explore how technology has made farming more efficient and the characters who have been at the forefront of these changes.

Learning outcomes

By the end of this activity students will:

- understand that intensive agriculture has costs for the environment such as the loss of farmland birds, insects and flowering plants, often classed as pests
- develop skills in persuasive writing. By using evidence and scientific facts, students will be better able to write a campaign letter that is calling for wildlife or certain country ways to be conserved or preserved.

Before your visit

Using the suggested links in this resource:

- Research and analyse the effects of intensive farming on our wildlife and richness of the countryside.
- Research the definitions of intensive farming and organic farming.
- Consider the benefits of intensive farming on our lives and why farming has developed in this way, and so rapidly.
- Consider the benefits of organic farming on our lives and wildlife; are there downsides to organic farming too?

Wildlife trends and farming

The UK Government uses the trends of UK birds in different habitats to gauge how well they are doing as a biodiversity indicator. They are used to help inform what conservation measures are needed to help British wildlife. **bto.org/science/monitoring/developing-bird-indicators**

Trends are showing that the UK's farmland birds and the country's moths, butterflies and bees are in dramatic decline. Their loss is linked to intensive farming. Despite these trends, modern farming and wildlife can live side by side if given a chance.

The following links refer to accessible illustrated reports that outline summaries of the declines. These are valuable resources for analysing the extent of the issue before researching how farmers and we, as consumers of their produce, can help understand and reverse these trends.

THEMES AND TOPICS

- Environmental change and effects on other living things
- Interactions and interdependencies
- Genetic modification/ biotechnology
- Ecosystems
- Challenges for Britain and Europe
- Use of natural resources
- Effective functioning of natural systems.

LINKS WITH OTHER ACTIVITIES

This activity could also be used in conjunction with the 'What is the future of the countryside?' resource.

The state of the UK's birds

Since 1999, *The State of the UK's Birds* reports have provided an annual overview of the status of bird populations in the UK and its Overseas Territories. They include trends for as many of the UK's regularly occurring species as possible including farmland birds compared with woodland birds. The link below will take you to the latest reports.

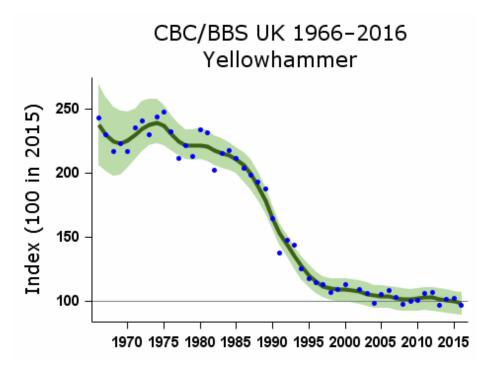
bto.org/research-data-services/publications/state-uk-birds





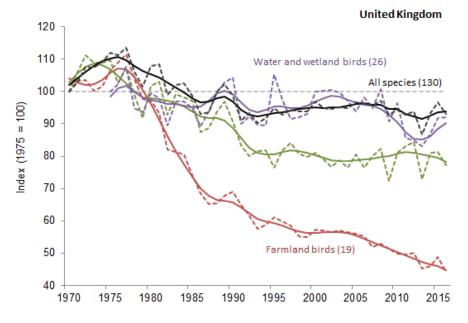


To view graphs of the latest trends of our farmland birds visit, **https://app.bto.org/birdtrends/**



This graph shows the population change of the yellowhammer found in farmland across the UK. It uses data from the Common Bird Census (CBC) and the Breeding Bird Survey (BBS). Look up other farmland species such as greenfinch, turtle dove, corn bunting, tree sparrow, linnet and grey partridge.

Changes in the abundance of breeding birds of woodland, farmland, water and wetlands and all-species in the UK



Source: BTO, Defra, JNCC, RSPB.

The state of the UK's butterflies

There is long-term evidence of butterfly trends to be found in *The State of the UK's Butterflies 2015* report. It draws on butterfly trends reported in the UK Butterfly Monitoring Scheme (UKBMS) and the Butterflies for the New Millenium (BNM) recording scheme.

Like birds, butterflies are also used as a biodiversity indicator to inform the Government how well the UK's insects are faring.

Summary: butterfly-conservation.org/1643/ the-state-of-britains-butterflies.html

PDF of report: butterfly-conservation.org/ files/soukb-2015.pdf

The PDF can also be found on the webpage for this resource.





The state of the UK's larger moths

The State of Britain's Larger Moths 2013 report shows clearly that moths are in decline. The total number of larger moths recorded in the national network of Rothamsted trap samples decreased by 28% over the 40 years from 1968 to 2007.

Summary: butterfly-conservation.org/1776/ the-state-of-britains-moths.html

PDF of report: butterfly-conservation.org/ files/1.state-of-britains-larger-moths-2013report.pdf

The PDF can also be found on the webpage for this resource.

The UK bee population

The Houses of Parliament produced a debate pack on the 10 November 2017 about the UK bee population. The pack can be found as a PDF on the same webpage for this teacher resource. Includes further links at the bottom (see PDF on this resource's webpage).

Reviving rare chalk grassland: short film

Our short film about Coombe Bissett Down, a Wiltshire Wildlife Trust nature reserve, shows reserve officer Ashley White and her colleague Dave Blake explaining how they are reviving rare chalk grassland habitat back to what it was like before it was ploughed. The film can be found on the website for this resource.





Visiting the Museum of English Rural Life

Understanding why our farmland birds and other wildlife are disappearing from our countryside requires more knowledge about what landowners, such as farmers, are doing on their land to produce crops and meat.

To gather information about farming technology, organic farming and artificial fertilisers, use the Forces for Change, A Year on the Farm and Wagon Walk galleries. Explore these galleries to discover more about what has been happening in our countryside over the past 50 years that may be affecting our farmland birds.

What to consider:

- How farm technology has changed so farmers are producing more crops and meat each year.
- Using the displays, identify the big changes in farmland use and when they took place (such as when wagons were made and developed in response to the ever-increasing field sizes).
- How farmers have been able to grow or produce all year round (eg making sure hens lay eggs all year round).
- The loss of wildlife habitat including hedgerows as fields get bigger and larger machines are used.
- How do farmers manipulate biorhythms to combat seasonality in eggs? (i.e. making sure chickens lay all year round.)

Further points for discussion during or after your visit

- Describe how genetic modification was achieved farmers using methods such as selective breeding. What are the advantages and disadvantages?
- Discover more about Eve Balfour,
 ladyevebalfour.org

Eve was a farmer and one of the first to develop organic farming. She set up the Soil Association which supports organic food and farming. What is organic farming?

- George Baylis (Forces for Change gallery) was one of the first farmers to begin using fertilisers.
- How might these different changes be affecting wildlife such as our farmland birds?
- What is the impact of the loss of a species on the food chain?
- What are the effects of the accumulation of pesticides in food chain?
- What were the unexpected consequences of some poisons, for example, salmonella originating from rats (Animal Health (drawer), Town and Country gallery)?
- The use of pesticides and other chemicals and the effects on wildlife and people.
- How can farmers help wildlife on their farms?



Persuasive writing

Use your evidence to create a persuasive piece of writing back at school encouraging:

- a farmer to farm organically so their practices are better for birds by using fewer chemicals such as pesticides
- a politician to help farmland birds by supporting debates in Parliament that will change policy and encourage farmers to produce crops and meat sustainably and provide more spaces for wildlife to live and feed
- a landowner to let grasses and flowering plants grow on the margins of fields for wildlife such as barn owls and butterflies, and to leave certain fields with no crops each year so they allow birds and other wildlife to live there.

Discover more about how Parliament works by visiting **parliament.uk/education/ teaching-resources-lesson-plans/**

What to consider:

- Think about who you are writing to and what you might need to say to encourage and persuade them.
- You will need to think about the language you use and what is going to catch their attention and be of interest to them

 you want to get the other person on your side.
- Choose emotive language when stating your point of view.
- Write in the present tense.
- Use words that give reasons for your point of view.
- Use connecting phrases to signal your points.
- Use alliteration and rhyme to help persuade.
- Use rhetorical questions (for example, 'how long can this go on?').
- Give pros and cons, and address the cons.

Great ways of beginning sentences include

- I think
- For this reason ...
- I feel that
- In the same way...
- As you can see ...
- On the whole ...
- In short ...
- Firstly...
- In addition ...
- Certainly...
- For example...
- In fact ...
- In support of this ...

This could also develop into a class debate around the issues.

Fictional letter writing

Imagine you are a declining farmland bird such as a turtle dove or a skylark. Write a letter asking for help from your local farmer. What will you tell them? What will you ask? What will you say to help them understand you need saving?

In the role of a farmer, write a letter to a declining farmland bird. Write about why you have been farming in this way, how you would like to make things better for wildlife on your farm and what you will do to make more homes for farmland birds.

Write a newspaper report

Using everything you have learnt about how modern farming techniques are affecting wildlife, write a report detailing what is happening, what needs to change to help animals and plants, what changes the government can make to support farmers and wildlife, and how we can provide more homes for wildlife.

What next? **Real campaign letters**

Find out if there are any local initiatives or campaigns by the Berks, Bucks and Oxon Wildlife Trust (bbowt.org.uk), Royal Society for the Protection of Birds (RSPB), Plantlife (plantlife.org.uk) or Butterfly Conservation Trust (butterfly**conservation.org**). The British Trust for Ornithology has a Farmland Bird Appeal (bto.org/support-us/appeals/farmlandbird-appeal) to help our farmland birds survive.

Help our farmland birds and other wildlife by becoming a campaign champion. The RSPB has a brilliant guide on how to campaign to motivate others to help be aware of and protect wildlife. This could involve encouraging more farmers to consider leaving space for wildlife when they are farming. rspb.org.uk/get-involved/campaigning/ become-a-campaign-champion

Campaigning is all about reminding your local member of Parliament (MP), or local decision-maker, that environmental issues are important and to urge them to take positive action). This might involve:

- writing a letter or e-mail to a politician or a local paper
- using social media to promote campaigns
- setting up or signing a current petition, and building support for others to do the same.

13 Letsby Avenue

Dear local MP,

our birds.

Yours faithfully,

I am very worried about there being

fewer insects, in particular bees, in our countryside. With fewer insects,

there are no animals to Pollinate our flowers and crops, or food for

I feel that we need to be using fewer chemicals, such as insecticides on our

farms, so that animals such as bees are not killed. Would it be possible

for more farmers to consider natural, less harmful ways of producing crops and controlling animals that eat

Snodland SNI 2PB

MERL galleries

