

Engagement

Hope Farm's work will only have maximum impact if we can share lessons learnt and compare notes with other farmers, researchers, policy makers and conservation organisations. In the 2021 – 2022 harvest year alone, we engaged with nearly 1500 people either by welcoming them to the farm, or talking virtually.

Our LEAF Open Farm Sunday has become a regular occurrence, with around 1000 people walking through the gates at each event to learn about nature-friendly food production.

Policy makers have come to the farm to see what we mean by nature-friendly and sustainable farming in arable systems, and to discuss how farmers can be better supported to reverse the decline in nature, reduce our carbon footprint, produce food and look after farm businesses.

Nearly 150 farmers, 40 advisors and over 200 individuals from conservation organisations have joined us to share lessons and take home ideas to help improve the important work we are all doing on the ground.



Stay connected
Keep up to date with the latest thinking, news, events and information from the RSPB in your local community.

[@natures_voice](#) [@TheRSPB](#) [@rspb_love_nature](#)

The RSPB is a registered charity in England and Wales 207076, in Scotland SC037654. 223-0603-21-22
Cover image: Sophie Mott RSPB

Farming and the RSPB

About one quarter of UK land is arable, making it a hugely important land use for nature, food production, the rural economy and our carbon footprint.

In 2000, the RSPB purchased Hope Farm to trial and demonstrate ways to farm with nature and be profitable.

Our work has shown that wildlife can thrive on highly productive farmland. Since 2016, we have tested new regenerative farming methods to help develop the knowledge that shows how restoring nature is intrinsically linked a sustainable farming system. Nature can work in harmony with the farm system to help combat both the biodiversity and climate crisis.

Monitoring

We monitor breeding birds, wintering birds, butterflies and bumblebees annually. This work is crucial to understand how the farmland ecosystem health is responding to our management.

Breeding bird monitoring: 177% increase

Breeding birds are monitored using the Common Bird Census (CBC) method to map the breeding territories of all birds on the farm.

Breeding bird populations have increased under our management and have been stable for over a decade, at a new level between 139% and 225% above baseline when we took over the farm. In contrast, national breeding populations have declined throughout this period. Numbers have fluctuated from year to year due to weather and other factors outside our control, but even in the poor years, populations on Hope Farm have remained consistently high.

Butterflies on the farm: 398% increase

Our butterfly monitoring uses the UK Butterfly Monitoring Scheme methodology to allow national comparisons with the farm data.

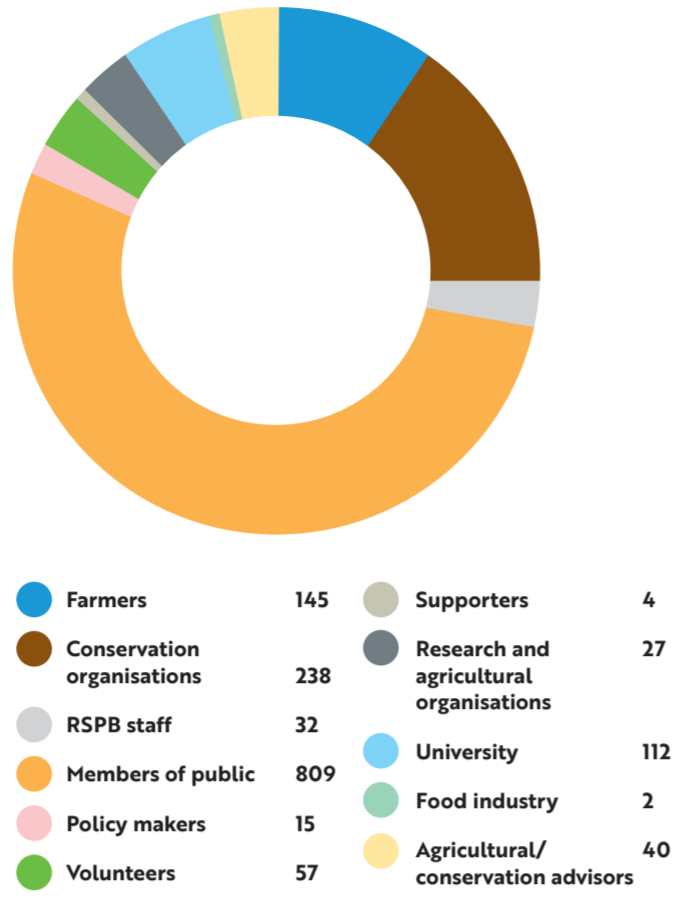
For the butterfly index, the long-term average trend has been a sustained increase ever since we took over the farm. Populations across the rest of eastern England have remained stable. They have seen marked short-term fluctuations in response to weather but these have had no lasting effect on the long-term population trends.

Winter bird monitoring: 1326% increase

Wintering bird numbers have shown an ongoing increase, but in recent winters there have been substantial peaks and troughs. The variation demonstrates our resilience in bird numbers and how the sort of management we do on farm contributes to winter bird survival. They have been recorded in high densities in cover crops, winter bird seed mixes, and on the supplementary feed in 2022/23 winter.

Over 100 students have joined us either on visits, to undertake research, or at online events to find out more about the scientific elements to our work and see how nature can thrive on farm.

Who have we engaged with in 2022?



Want to stay up to date on the work that we do at the farm and across the RSPB in farming? Sign up to our newsletter here:



Hope Farm

Farming for a sustainable future - for people and wildlife



Spring oat harvest
Sophie Mott RSPB



Painted lady on knapweed
Georgie Bray RSPB

Bumblebees

Bumblebees have been monitored at Hope Farm and compared to a control farm without the environmental management using Beewalk methodology. On average, 11 times more bumblebees are found on Hope Farm thanks to the provision of food, shelter and breeding habitats.

Habitat management

Everything we have done at Hope Farm is aligned to the Farm Wildlife six key actions identified by this partnership of leading wildlife organisations.

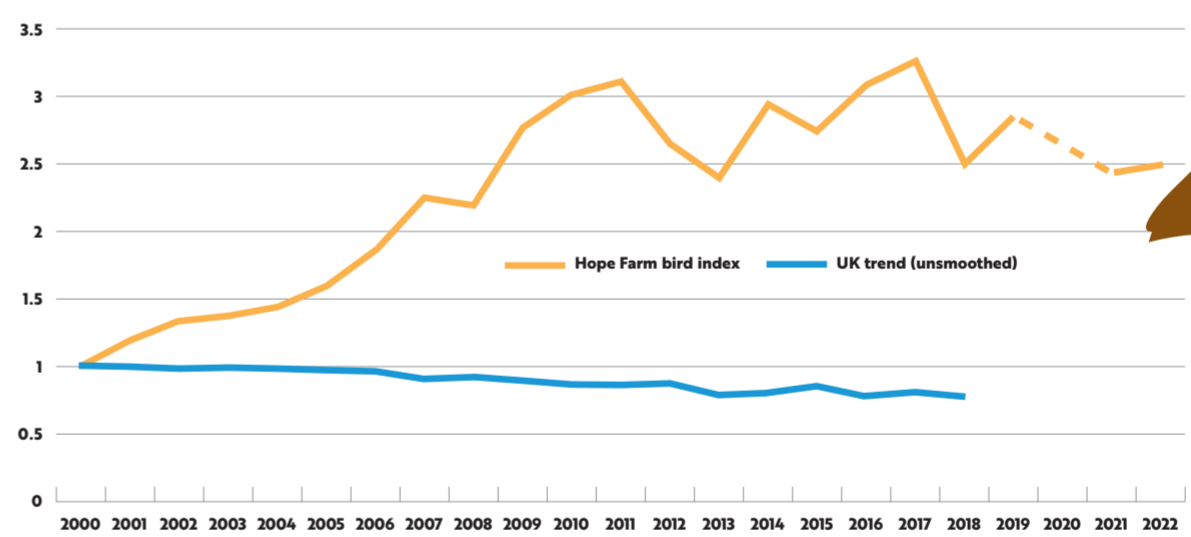
Farm Wildlife six key actions:

- **look after existing habitats** that are established on the farm, since as they are often the most wildlife-rich. Managing existing features well should be the priority when providing space for wildlife.
- **field boundaries** are an important habitat for wildlife, as well as providing connectivity across the landscape.
- **seed-rich habitats (2% minimum)** are important to support many farmland birds through the winter.
- **flower-rich habitats (2% minimum)** are important to support a diversity and abundance of insects including crop pollinators and pest predators.
- **wet features** are a crucial element for a wide range of wildlife, not just aquatic species.
- **the farmed area** can be improved with regenerative practices, restoring biodiversity in the soil and helping to protect crops.

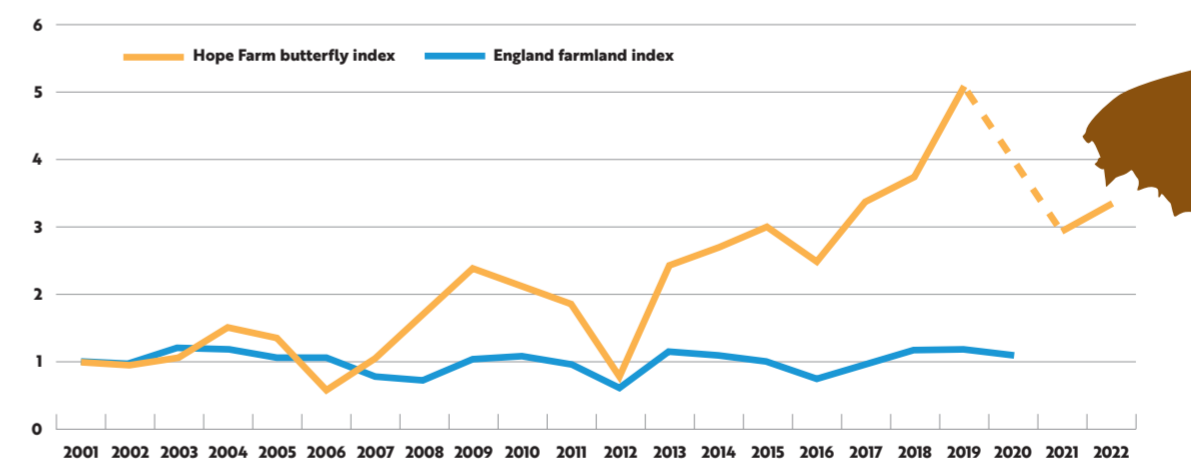


The indices for birds and butterflies are calculated using an averaged percentage change of each farmland species to produce a Hope Farm index.

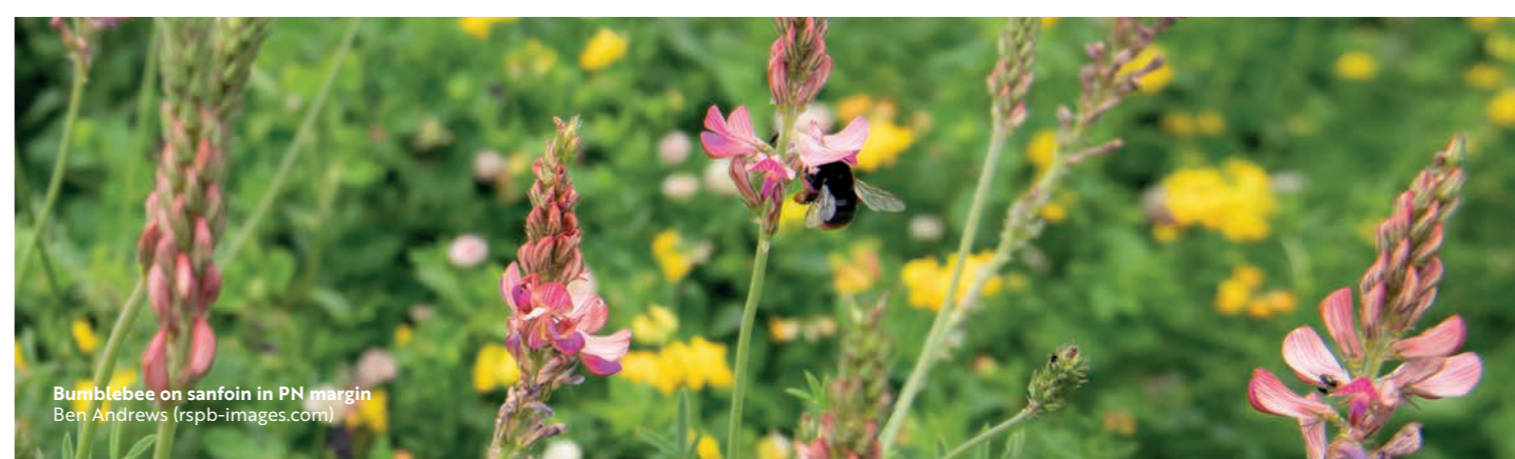
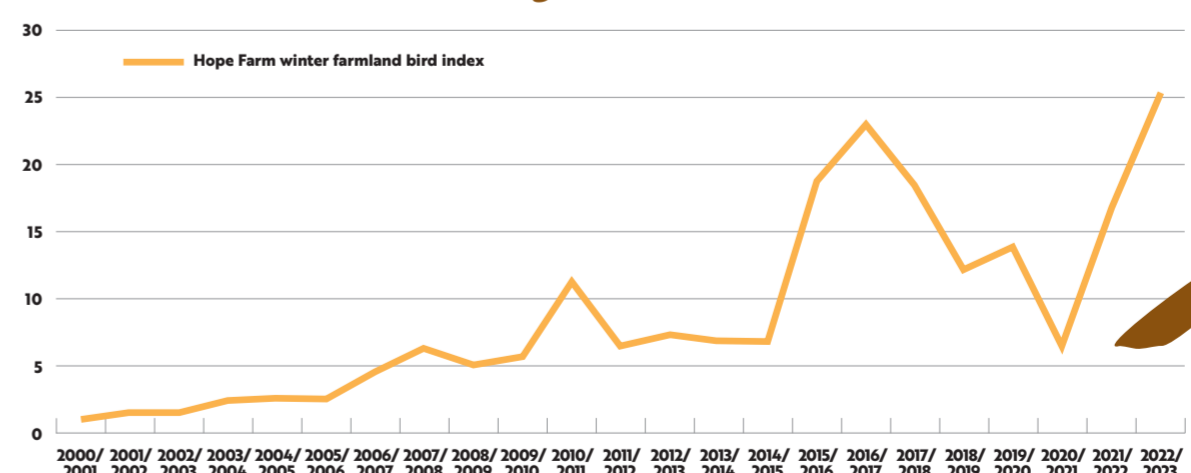
Breeding farmland bird monitoring



Butterfly monitoring



Winter farmland bird monitoring



Bumblebee on sanfoin in PN margin
Ben Andrews (rspb-images.com)

Cropping management

We have moved towards regenerative practices to boost natural resources from the soil, and beneficial invertebrates and microfauna which help crops to thrive in a more sustainable way.

Here are some of the key regenerative principles that we look to adopt on farm:

- **a diverse rotation** – we have diversified to grow at least seven different crops, in contrast to just wheat and oilseed rape when we first purchased the farm.
- **adoption of cover cropping, intercropping and companion cropping** – to assist in improving our soil health, and to reduce the risks of pests and disease affecting our crops alongside other benefits.
- **reduced cultivations and direct drilling** – to enable our soil to function better by reducing disturbance, increasing soil structure and resilience.
- **adding organic matter** – to improve the food supply to our soil macro and micro-fauna, supporting them to carry out vital ecological functions as well as improving carbon sequestration.
- **integration of livestock within the arable cropping system** this is an aim over the next few years, to bring organic matter on to the farm, whilst adding another income stream and diversifying our food production.
- **integrated Pest Management** – we have stopped using insecticides and reduced our reliance on other pesticides through cultural control of pests and diseases. Diverse and connected habitats can increase numbers of beneficial invertebrates. Tolerant varieties are selected to improve crop resilience to reduce pest and disease risk with reduced pesticide use. Although we are not an organic farm, we adopt many organic strategies to improve our ability to use pesticides as a last resort.

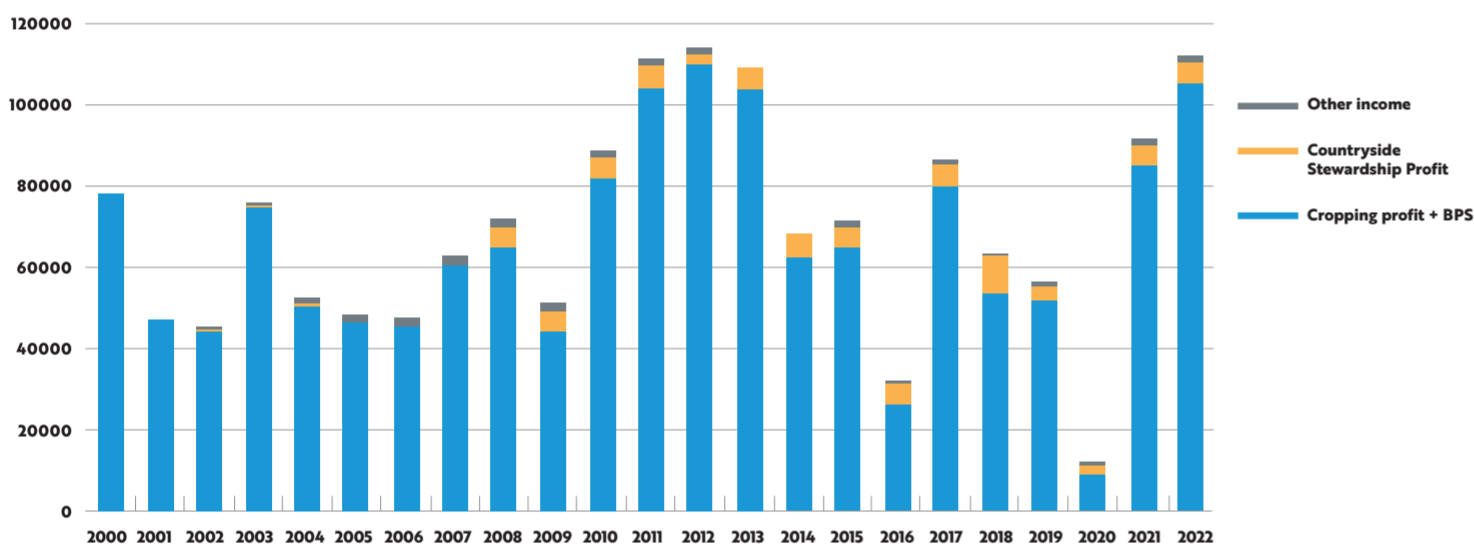
The farm is accredited under Fair to Nature, the only UK certification scheme with a focus on biodiversity and a proven approach to restoring the balance of nature in farming.

This gives us access to niche marketing opportunities and Fair to Nature customers the security of knowing products from our farm come from a wildlife-friendly farming system.

To find out more about Fair to Nature, follow this QR code:



This graph shows the total profit that we attain from the farm, after paying for our contractor's operations. The profit is then split between us and the contractor under a Contract Farming Agreement.



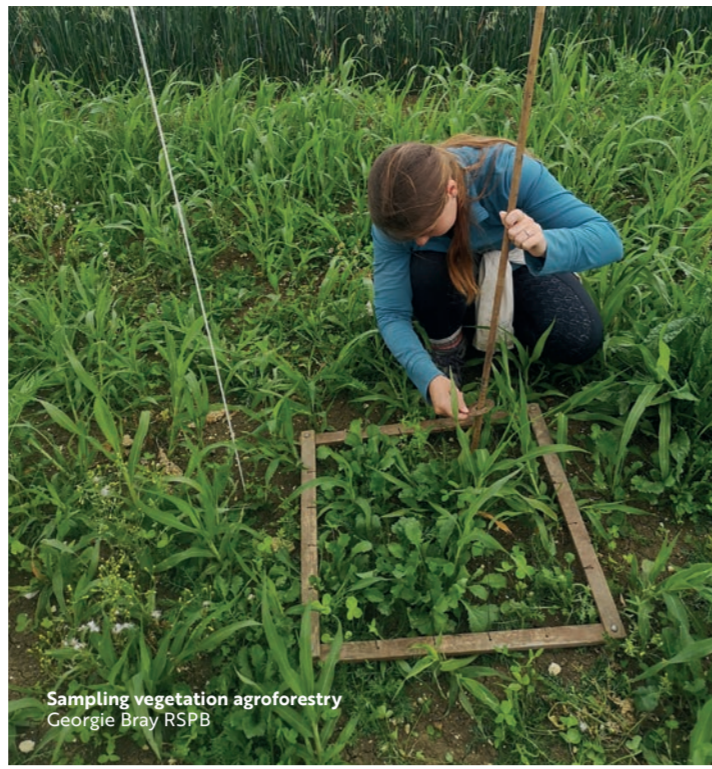
Wildflowers in turtle dove pilot 2022
George Bray RSPB

Research Trials

Researching new solutions is an important part of what we do. To keep up to date with our trials on farm, subscribe to the farming blog here:



Reed bunting
Kevin Pigney



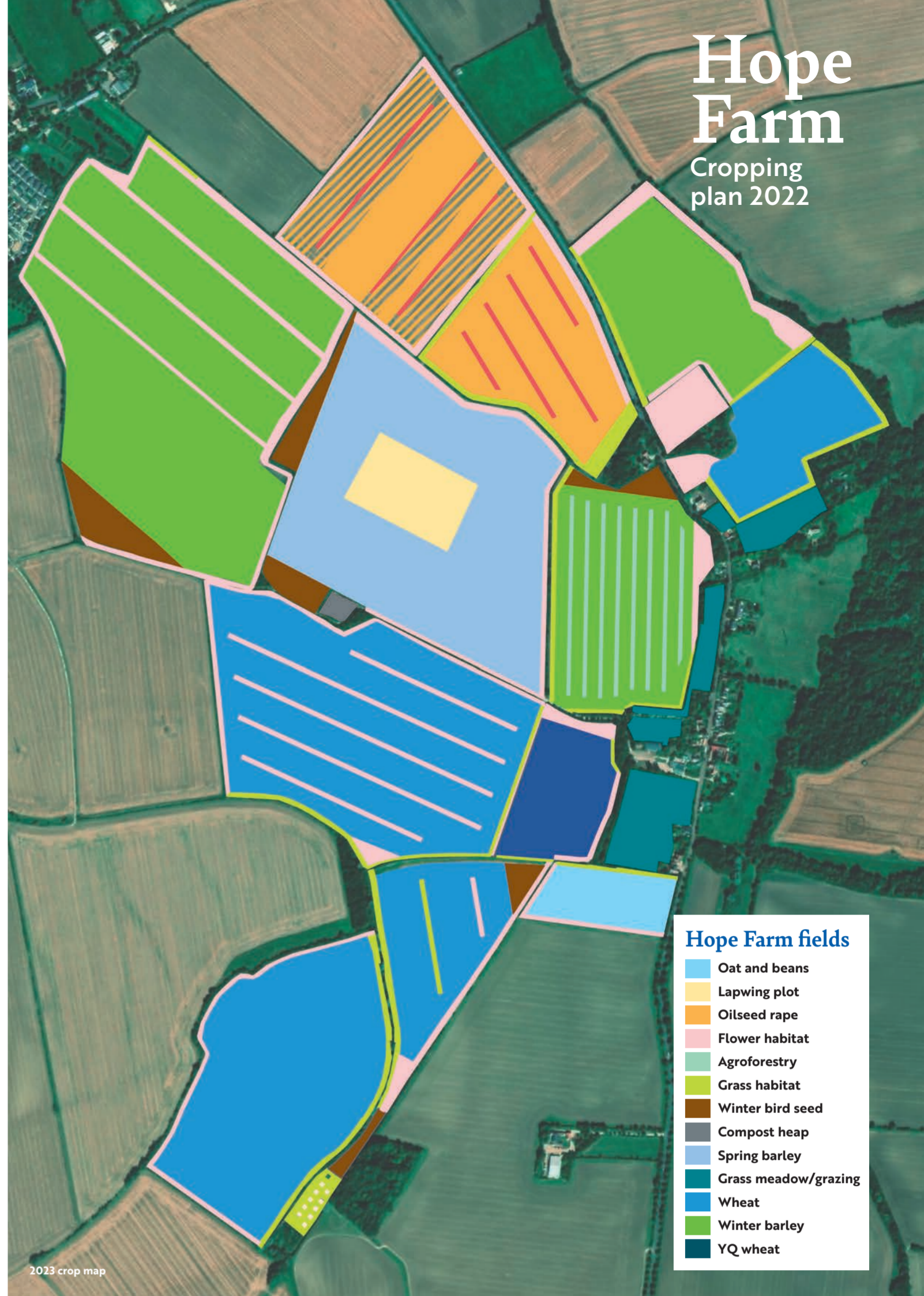
Sampling vegetation agroforestry
George Bray RSPB

Finances

We track our yields and profits to check that our nature-friendly practices make business sense. However, profits have to be balanced with the risk-taking on our field-scale trials, testing regenerative practices on our own land, and working through hurdles to speak from a position of experience.

Despite these additional risks, we have managed to maintain a steady income from the farm, with the exception of a few poor years due to seasonal waterlogging or drought (with 2020 losses exacerbated by our commitment to a trial protocol).

Countryside Stewardship gives us a better income than we would get from cropping on the low yielding areas of the farm, and also adds a reliably constant income source to buffer against poor years.



ASSIST

The ASSIST Arable field experiment was a 5-year collaboration between CEH, Rothamsted Research and c.20 farmers in the SE England including Hope Farm. The aim was to test sustainable farming practises that enhance ecosystem services vital for supporting crop production (pollination, pest regulation and soil health). Practises included sown wildflower field margins at field edges and in-field strips to support biodiversity beneficial to crop production (pollinators and natural enemies of crop pests), growing of cover crops and addition of organic matter to enhance soil functions.

Fields that included all sustainable practises had the highest numbers of worms, predation of aphid pest and yields than fields that had only margins at field edges or fields that had no added practises. Although full statistical analysis has yet to be done (watch this space!), these preliminary findings clearly show that sustainable farming practises work and can deliver real benefits for biodiversity and productivity.



Carbon Farming Project

The carbon farming project is looking to reduce GHG emissions in ways beneficial to nature. The project will review carbon auditing tools available to land managers, helping us to recommend practices that are win-win for climate and biodiversity, alongside producing a long-term plan for Hope Farm to reduce our own emissions in a nature-friendly way. The findings will help to inform policy, advocacy and advisory teams on how to balance nature's recovery and 'Net Zero' ambitions.



Hedgelaying with volunteers
George Bray RSPB



F10 and assist margins 2020

Agroforestry

In the winter of 2021, we planted a combination of fruit, nut and native broadleaf trees into an arable field, a form of agroforestry known as alley cropping. This field, along with a control field, are being used to research the benefits and trade-offs for nature, the farm business, and carbon emissions. We're installing a flux tower to capture any cyclical carbon changes. This work has been planned with the help of many organisations, and the flux tower research made possible with generous donations and the help of the Centre of Ecology and Hydrology.

A flux tower measures the exchange in carbon dioxide between biosphere and atmosphere at field level, allowing us to better understand what changes the introduction of trees have made.

Where next with our research?

Research is planned over the next few years looking in to the impacts of pesticide exposure on wildlife and how to mitigate pesticide problems. Trials have been planned in collaboration with Centre of Ecology and Hydrology, and ECORISC.

We are also hosting insecticide-free oilseed rape trials using trap crops, organic matter, and companion cropping. These trials have been planned and piloted with the help of Rothamsted Research and ADAS.