



LINKING ENVIRONMENT AND FARMING



CLIMATE CHANGE: WHAT CAN WE DO TO HELP?



LEAF Education



www.farmsunday.org



TAKING ACTION NOW ALL OF US CAN MAKE A DIFFERENCE

We all know that climate change is a major concern. Or do we? There are still many of us who find this subject too big to understand or who think we, as individuals, can't make a difference. But that is not the case!

The good news is that all of us have a part to play. Every little thing we do adds up to something much bigger. The most important thing now is to seize the moment – for ourselves and our children.

Many industries across the world are looking at how they can limit their impact on the environment and farming is no exception. Farmers are on the front line of tackling climate change.

We've pulled together information for you to learn more about this important topic, find out how farmers are working towards a healthier planet, and suggestions on actions you can take to help.

Together we can all make a difference – but we need to act now!

This booklet has been produced by LEAF (Linking Environment And Farming) - a global charity working with farmers, the food industry, scientists and environmentalists, looking at new ways to help farmers, while enriching the environment and engaging society in a meaningful way. Find out [more](#) & [donate](#).



LINKING ENVIRONMENT AND FARMING

“The world we live in is out of balance with nature. The range of Greenhouse Gases that are emitted through human activity are a huge factor contributing to Climate Change. Together we all need to play our part in reducing our impact on planet Earth.”

- *David Attenborough*



CLIMATE CHANGE: WHAT IS IT & WHAT NEEDS TO HAPPEN?

Climate change has been described as the biggest threat that humanity has ever faced.

This all sounds very gloomy and it is a fact that we are seeing increasing numbers of climate-related disasters. This is the result of a massive blanket of pollution surrounding the earth. This blanket is overheating the air we breathe, our homes and our oceans. It is caused by pollution from industry but also from our own actions.

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FARMING



WHAT ARE FARMERS DOING TO HELP CURB CLIMATE CHANGE?



Farming, more than many other industries, is feeling the effects of changing weather patterns with more frequent and severe weather events. Many farmers around the world have suffered increased flooding which ruins their crops and soil; or faced wildfires which wipe out not only crops and livestock but businesses, homes and wildlife too. Increased temperatures and lack of rain can result in severe droughts. In all these cases, our food supplies are threatened and food becomes more expensive and not so readily available.

Farmers are constantly monitoring, refining and improving their farming practices using the best of traditional methods alongside modern science and technology. They are increasingly turning to more regenerative, nature-based farming systems to care for the environment and combat climate change.

Over the next few pages are just some of the things they are doing...





FOR WATER

- Many farmers use smart technology to monitor water use and moisture levels in fields and crops.
- Irrigation systems can deliver a very low amount of water to give a crop, such as strawberries or tomatoes, only what they need to thrive, exactly when they need it.
- Farmers reuse and recycle water when possible, using natural sources like reservoirs and capturing rainwater.
- Soil and water management are closely linked. Farmers work to improve the quality of the soil so it holds more water through things like the crops they grow, techniques used, grazing of animals and conservation practices.

FOR BIODIVERSITY

- Farmers care for, protect and enhance hedgerows, woodlands, and wildflower meadows. They create areas for wildlife, plant trees, manage field margins, ponds and reservoirs which in turn boosts wildlife habitats for animals, birds and insects.
- Pockets or strips of land are set aside to grow mixes of wildflower seeds providing pollen, shelter and food for bees, other pollinators, mini beasts, and birds.
- Farmers maintain thousands of miles of footpaths to enable everyone to have access to the beautiful British countryside.

FARMING STORIES



AJ and CI Snell is a LEAF Demonstration Farm and one of the UK's leading fresh and frozen fruit growers based near Ross on Wye in South Herefordshire. The farm has introduced a wide variety of ways to combat climate change including capturing rainwater to use on crops; trialling electrical weeders to reduce chemical usage; installing nest boxes to encourage more birds which are under threat because of changing weather patterns.

Find out more [here](#)



FOR SOIL

- Healthy and productive soils are alive with microscopic biodiversity and are able to store vast quantities of carbon – one of the main greenhouse gases which contributes to climate change.
- Healthy soil equals healthy crops – which is why caring for the soil is a vital part of farming more sustainably and ensuring the land is as productive as possible.
- Farmers improve soil structure by increasing soil organic matter, adding manures, rotating the crops they grow and by growing cover crops so that soil is never left bare. Together, all these measures help to improve the quality, performance and resilience of the soil, reducing erosion, holding in moisture, and providing a great habitat for mini beasts and wildlife.
- Many farmers no longer plough fields and directly sow seeds into the ground with minimal disturbance to the soil. This helps to conserve the structure of the soil.

FOR ENERGY EFFICIENCY

- Reducing fossil fuel consumption and moving to renewable energy sources is one of the most effective ways to combat climate change. Sustainable farmers are turning to solar and wind power where they can, and use systems that track their energy use and carbon footprint.
- They also make sure vehicles and equipment are correctly maintained and serviced, checking tyre pressures, properly insulating buildings and switching off lights when not in use.



FARMING STORIES

Tregullas Farm is the most southerly farm in mainland UK, based on the Lizard Peninsula and farmed by Neville and Rona Amiss. The farm sits in the Lizard National Nature reserve and is also a Site Of Special Scientific Interest (SSSI). Rona has a small herd of cattle grazing the cliffs all year round, where some of the rarest wildflowers grow. Cattle are selective grazers and if managed well, will keep the long grass down allowing wildflowers to thrive. The farm is also known for the return of iconic chough in 2001.

"To help our thriving chough and bird populations we have cattle that graze all year round. We don't use persistent wormers for our cattle, which helps invertebrates in the soil to thrive and provide adequate feed for the birds. By cutting silage late and growing cereal crops with reduced seed rates, we are able to give skylarks and ground nesting birds the opportunity to nest. We also use herbal leys and mixed cropping to improve our soils, as well as plant field margins and trees to keep our streams clean and healthy."

Find out more [here](#)

FOR WASTE REDUCTION

- Farms can produce a range of waste products, so sustainable farming focuses on reducing, reusing and recycling wherever possible.
- Plastics are a particular priority, with farmers reducing or eliminating plastic use through recycling and using alternative materials.

FOR ANIMALS

- Farmers work hard to look after the welfare and wellbeing of their animals – making sure they have the right food, shelter and stimulation.
- Farmers carefully monitor their animals every day looking at lameness, body condition, hair quality and any abnormal behaviours, so they can respond quickly.
- Farmers carry out a wide range of basic health care for the animals such as looking after hooves, administering medicines, taking temperatures and treating minor wounds.
- Healthy animals use fewer resources and have a positive environmental impact which contributes to other issues such as reducing greenhouse gas emissions and improving the soil.





FARMING STORIES

Frogmary Green Farm is a LEAF Demonstration Farm based in Somerset managed by Nick and Clare Bragg, and their main business is rearing chickens. They are almost self-sufficient in terms of electricity and heating on the farm, as they have their own anaerobic digester which changes waste material into heating for 95% of the farm.

High animal welfare and environmental standards run through everything that is done on the farm. They are keen to share these values through organised farm tours and visits, and they also have a cookery school to further engage people with their food and where it comes from.

Find out what else is happening on the farm [here](#).





FOR CROPS:

- Farmers are increasingly turning to science and smart technology to meet our future food needs and tackle the climate emergency. Precision farming tools, including GPS (Global Positioning System), GIS (Geographical Information System) robotics, remote sensors, yield mapping and auto-guidance systems, help farmers grow healthy crops, increase yields and look after the environment.
- Farmers are increasingly turning to more sustainable 'biological' methods of pest control (Integrated Pest Management) to keep crops healthy and stop pests in their tracks before they become a problem.
- Planting pollen and wildlife strips, carefully managing field margins and headlands, creating beetle banks and having a wide diversity of different crops are all being used by farmers to grow healthy crops, increase yields and look after the environment.

FOR THEIR BUSINESSES:

- Just like any forward-looking business, farmers are always looking at ways to improve and build resilience.
- Farmers work to build their own and their staff's knowledge and skills about sustainable farming techniques and will get involved in training, on-farm events and keep abreast of the latest technological developments.
- Many farmers develop detailed management plans for storing and reducing carbon, water, soil and waste management, livestock performance and wildlife and nature conservation.





FOR PEOPLE:

- Knowing more about how our food is produced and what farmers are doing to farm sustainably, helps build trust and understanding of what farming delivers and why it matters.
- Farmers are a big part of their local communities and many host visits, give talks and get involved in public outreach projects like [LEAF Open Farm Sunday](#) and [Farmer Time](#) to help nurture an interest in the natural world and build awareness of the role we all play in helping protect it.



To find out more,
read this blog, **'Net Zero...
What are farmers doing
about it?'** by Andy Guy
*Consulting, an independent
sustainable food and
farming consultant.*





EATING



HOW DO OUR FOOD CHOICES HELP FIGHT CLIMATE CHANGE?

*The whole process of growing, making, distributing, storing and cooking our food all uses a lot of energy, fuel and water. Here, Registered Nutritionist (AfN) and food safety consultant, **Barbara Bray MBE**, shares the reasons why it is important that we eat healthily and sustainably...*



The importance of eating a healthy balanced diet is something many of us are aware of, however, did you know that what we eat can affect the planet too? From choosing cooking methods that use less energy, to choosing sustainably produced foods, every food decision we make can impact the environment. Whilst we grow a lot of the food we need in Britain – from fruit and vegetables to dairy and meat – we also import food from other countries, which is why it is important our choices are both healthy and sustainable.



SO, WHAT DECISIONS CAN WE MAKE TO KEEP OURSELVES HEALTHY AS WELL AS OUR PLANET?

It is the overall diet rather than individual foods which are healthy or unhealthy, which is why I live by the mantra 'Eat a rainbow' – eat a range of fruit and vegetables of different colours every day. Eating a varied diet gives your body an array of essential vitamins and minerals. Healthy meals should include plenty of fruit and vegetables, wholegrains, pulses or some meat, fish or dairy items.

It is great to have a wide choice of foods, but it is equally important to plan meals to ensure you waste as little as possible.

Farmers spend months and years nurturing the land, growing crops and caring for livestock whilst protecting and enhancing the environment. If the food they produce ends up uneaten in the bin, then the energy used to produce it has been wasted. Waste food that ends up in landfill then produces greenhouse gas emissions contributing to climate damage.





Buying food produced to high environmental standards, like those from LEAF Marque certified farms. These products have been grown sustainably to high environmental standards by farmers who are reducing their carbon footprint, improving soils, minimising energy use, reducing waste, recycling products and taking active steps to boost biodiversity. [LEAF Marque](#) farmers are delivering climate positive action through resilient, nature-based farming techniques.

Cooking our meals from scratch using core ingredients, such as fruit and vegetables, meat and dairy products, is a great way to ensure we are eating healthily and get all the essential nutrients we need.

Choose cooking methods that use less energy, such as microwaving a jacket potato instead of baking it in the oven uses less energy or boiling water for pasta in a kettle, rather than heating up an open pan of water on a gas cooker.

A close-up photograph of a person's hands washing strawberries in a kitchen sink. The hands are positioned over a teal-colored cutting board, which is placed on a dark, speckled countertop. Several bright red strawberries with green leaves are visible on the board. The background is softly blurred, showing a white sink and a showerhead, suggesting a clean, modern kitchen environment. The word "LIVING" is written in a green, sans-serif font across the top of the image.

LIVING



WHAT CAN WE DO TO MAKE A DIFFERENCE?

SHOPPING SUSTAINABLY!

- Plan meals to ensure you waste as little food as possible.
- Make a list before you go shopping and stick to it!
- Don't be tempted by 2 for 1 offers if you know you won't use the additional item.
- Buy in bulk items that you eat regularly such as pasta and rice.
- Remember to take your own reusable bags.
- Try to buy foods without excess packaging.
- Shop regularly for fresh food items such as fruit and vegetables – or grow your own!

EATING OUT SUSTAINABLY!

- If you don't want a side salad, ask for your meal without it.
- If you won't make good use of the extra portion, don't be tempted
- If you can't finish your main, ask for a doggy bag!
- Ask questions and look on menus and websites – do they support seasonality? Do they mention their food origins? What farms are they buying from?
- Bring your own coffee cup, decline plastic cutlery and extra napkins.



EVERYDAY SUSTAINABILITY!

- Save energy by turning off lights and tech when you can – this includes TVs and computers.
- Save water by turning off the tap while you brush your teeth.
- Change to a reusable water bottle instead of a single-use plastic one.
- Cut down on plastic food coverings and turn to reusable tubs.
- Don't throw waste water down the sink. Use it to water plants instead.
- Can you shower in four minutes or less to save water? Set a timer!
- [Recycle](#) as much as you can.
- Use paper responsibly by writing on both sides and saving scraps for notes.
- Think about keeping your clothes for longer - The [Love Your Clothes](#) website provides information and tips to help you look at the way you purchase, use and dispose of your clothes.
- Walk or bike somewhere you would normally drive to.
- Learn to repair something you would normally replace.



GARDENING SUSTAINABLY!



It is estimated that three out of four crops across the globe, which produce fruits or seeds for us to eat, depend on bees or other pollinators. But the numbers of bees are declining for a variety of reasons, including higher temperatures, shifting seasons and extreme weather events.

What can we do to help?

- Grow more pollinator friendly flowers, shrubs and trees.
- Leave an area of your garden to grow wild.
- Cut your grass less often.
- Don't disturb insect nest and hibernation spots.
- Capture rainwater in a water butt to use on your plants.
- Think carefully about whether to use pesticides.
- If you have the space, use a compost bin so that any food waste can help to nurture your plants.
- Do not buy peat based composts.

Find out more [here](#)!





WHAT IS LEAF DOING TO HELP?

ABOUT LEAF (LINKING ENVIRONMENT AND FARMING)

LEAF (Linking Environment And Farming) is a global charity working to inspire and enable sustainable farming that is prosperous, enriches the environment and engages local communities. We work with farmers to promote climate positive farming through Integrated Farm Management and the sharing of knowledge through the LEAF Network. Many farmers across the globe produce food to our sustainable assurance standard, LEAF Marque. We are passionate about engaging and educating the public about food and farming through LEAF Education and LEAF Open Farm Sunday.

LEAF MARQUE



LEAF Marque is a leading global assurance system recognising more sustainably farmed products. LEAF Marque certified businesses have been independently verified against the robust LEAF Marque Standard, which is underpinned by the principles of Integrated Farm Management.

www.leaf.eco



LEAF OPEN FARM SUNDAY



The farming industry's annual open day, where farms across the UK open up their gates to the public!

Future dates are: 12th June 2022, 11th June 2023. Follow our social media channels and visit farms virtually with [LEAF Online Farm Sunday!](https://www.farmsunday.org)

www.farmsunday.org



LEAF EDUCATION



If you are a teacher or work with children and young people, LEAF Education might be able to help you. Through our team of Regional Education Consultants, we work to encourage teachers to include food, farming and environment topics into the curriculum and we train farmers to host exciting and interactive farm visits to inspire young people.

www.leaf.eco/education



COUNTRYSIDE CLASSROOM



Countryside Classroom helps teachers to find resources, places to visit and school support relating to the themes of food, farming and the natural environment. The website contains a range of quality assured educational content from hundreds of contributors.

www.countrysideclassroom.org.uk





This booklet is a brief introduction to the complex topic of climate change and we have only brushed the surface! We hope it will help to encourage you to introduce some small changes into your daily lives so that together we can all make a difference.

Interested to know more?
Sign up to our newsletter, LEAF Life, [here](#)

If you're keen to support the work that LEAF does, become a member or donate go to
www.leaf.eco

+44 (0)24 7641 3911
enquiries@leafuk.org

LEAF (Linking Environment And Farming)
Stoneleigh Park, Warwickshire, CV8 2LG
Charity registered in England and Wales, no. 1045781