



## Land Use & Agriculture Action Group

### September 2021 Report

Chair:

Sir David Normington

Group Members:

Margaret Paren, *SDNPA Chair, 2010-2020*  
Prof. Andy Moffat, *Environmental Applied Scientist*  
William Selborne, *Blackmoor Estates Ltd*  
Ben Gibbons, *National Farmers' Union*  
Will Benson, *Applegarth Farm*  
Kate Faulkner, *Norton Farm*  
Lionel Fanshawe, *Terra Firma Landscape Architects*  
Ben Robinson, *Kings Farm*  
Eleanor Hill, *Alton Climate Action Network*  
Melanie Oxley, *Petersfield Climate Action Network*  
Kim Wilkie, *Landscape Architect*

## Introduction

The planet is heating at an alarming rate with already devastating consequences for many parts of the world. Urgent action to reduce greenhouse gases is vital. There must be ambition and urgency at international, national and local level. Much of the current action does not measure up to the scale of the crisis. In East Hampshire we can, of course, only make a small contribution to solving the crisis. Our belief is, however, that everyone can play their part, however small their individual contribution; and that those in leadership positions must particularly act with urgency and at scale. There is no time to lose.

Our **land use and agriculture action group** was one of three action groups, set up by Damian Hinds, our local MP in East Hampshire. It comprised local farmers and farmers' representatives, members of the climate action networks in Petersfield and Alton and experts in planning, landscape, local government and arboriculture. Our terms of reference were **“to examine what we can do in East Hampshire to reduce carbon emissions and increase carbon capture, to improve biodiversity and to help communities adapt to the impact of climate change”**.

In the course of our work we have discussed and examined the wider national and international policy context, but we have sought to focus our work on those issues, which are directly relevant to the impact of land use in town and country on reducing greenhouse gases and climate change. Our report is in four parts:

- some key facts about the climate crisis and the action needed locally and nationally;
- our five priorities for action;
- our recommendations to the UK Government; and
- our proposals for the action we can all take in East Hampshire.

## Land use and greenhouse gas emissions: what we have learned

The action group's work has been informed by some key facts:

- i. farming currently accounts for about 10 per cent of UK greenhouse gas emissions (compared with 33 per cent globally). 1.2 per cent of those emissions is carbon dioxide, 5.5 per cent is methane and 3.3 per cent is nitrous oxide. Methane from farms is largely produced by cows and sheep; nitrous oxide, by the use of nitrogen fertilisers and manure. Both are extremely potent. These are, however, only the direct effects of farming and land use. If we look at the whole food supply chain, there are substantial additional CO<sub>2</sub> emissions from the manufacture of fertilisers and pesticides and in the processing, packing and transportation of food.
- ii. low carbon farming practices (including better soil management, reduced ploughing, less fertiliser, better animal health and improved feed) can all reduce emissions and improve biodiversity. There is increasing evidence of the benefits of regenerative farming where the emphasis is on mixed rotational farming with diversity of crops, more cover crops and the integration of stock to provide natural manure. If properly worked and managed, soil, pasture, woodland and hedgerows can all sequester carbon, so that land use can make a net positive contribution to reducing greenhouse gases. There are particular benefits in planting trees, which are major storers of carbon. The Climate Change Committee, the UK's chief adviser on climate change, has recommended that by 2050 at

least 20 per cent of agricultural land should be released for actions, which reduce emissions and sequester carbon.

- iii. carbon reduction is properly the main focus of international and national action but methane is also a major contributor to global warming, being many times more potent than carbon dioxide. Unlike carbon, methane dissipates in the atmosphere relatively quickly (i.e after about 12 years), so that reducing – or even stabilising – methane emissions has a disproportionately beneficial impact on the climate. There are differing views about the best ways of reducing methane in the UK. The farming community argue that beef, dairy and sheep farming in the UK already has some of the lowest methane emissions in the world (including the EU); that good farming practice can reduce emissions even further; and that more can be achieved by encouraging consumers to buy British produce in preference to imported food from countries with lower farming standards. The Climate Change Committee and other scientific and health experts have in contrast recommended a 20 per cent reduction in consumption of meat and dairy in the UK and a consequent reduction of at least 10 per cent in the number of cattle and sheep by 2050. The Government has not so far been persuaded to accept that recommendation.
- iv. reducing food waste is another vitally important way of reducing greenhouse emissions both because it reduces the demand for more food to be grown and because food waste in landfill sites is a major source of greenhouse gas, particularly methane, emissions. Globally food waste emits more carbon than most individual countries, except China and the USA.
- v. the nature of farming in the U.K. is particularly influenced by Government policy and financial support. Since the Second World War the emphasis in the UK and EU has been on producing cheap food to feed a growing population, supplemented by incentives for environmental protection and countryside stewardship. There has been little focus on climate change per se and even less on reducing greenhouse gases. Over 50 years and more we have got used to cheap food, but have cared hardly at all for the impact on the climate.
- vi. leaving the EU and coming out of the Common Agricultural Policy provide an opportunity to reshape agriculture policy in the U.K. The Government has signalled its intention to focus future grant schemes for farmers on public goods, which include reducing greenhouse gases alongside other environmental benefits. It is proceeding cautiously as befits such an enormous change of direction, testing out the approach through pilot schemes. The uncertainty is, however, inevitably causing many farmers to ‘wait and see’, slowing progress just at the time when action needs to be speeded up. The full transition to the new grants framework will not be completed until 2028 with the benefits not seen until the 2030s. This seems perilously late, given the scale of what is needed.
- vii. an effective land use strategy would, however, not be just about how we use productive farmland. Farmers often have a proportion of marginal and unproductive land, some of it in (largely unmanaged) woodland. About 25 per cent of land is not farmed and is owned by householders, charities, local authorities, businesses and public agencies. With the right policies there can be multiple benefits for the climate and the environment – reducing carbon and other greenhouse gases, improving carbon storage, helping climate adaptation, promoting biodiversity and improving habitats. This is particularly true in more urban areas where the value of a green infrastructure is under appreciated.

- viii. there is no shortage of learned papers, net zero strategies and action plans on land use and climate change but many are highly technical and difficult to understand. There are innumerable public agencies and legal regulations covering agriculture and land use. They are being added to all the time, for example by the Environment Bill, which is currently going through Parliament. We have constantly wondered where people and businesses, and particularly farming businesses, can go for clear and simple advice.
- ix. finally, it is important to avoid unintended consequences. Taking farmland out of productive use, for example, will be pointless, if that simply reduces the amount of home produced food and draws in imported food, transported long distances, from countries with lower emissions' standards. The demands to reduce the number of cows and sheep must also be balanced against the importance of those animals to maintaining the quality of grassland in the UK and in their potential to fertilise and improve arable land, particularly as part of rotational cropping. The long-term objective should be sustainable, productive, profitable farming, producing food in the U.K. which the consumer wants to buy and can afford. UK farmers can then be part of the solution.

### **Land use and greenhouse gas emissions in East Hampshire: what we have learned**

The impact of land use on the climate is particularly relevant to East Hampshire with its high proportion of good agricultural land, pasture and woodland. Our work has shown us that:

- i. greenhouse gas emissions from land use in East Hampshire are falling faster than the national average and from a lower base. This suggests there is already a willingness among farmers and other landowners to take action, if the right support is in place and the direction is clear.
- ii. there are many excellent examples of good local farming practice, which have informed our thinking. For example,
  - the **Selborne landscape partnership** (covering 5,500 hectares and 22 farms) shows how the environment and wildlife can benefit when farms work together. The cluster has also recently planted 160 Dutch elm disease resistant trees. The majority of farms in East Hampshire are in some form of cluster: there is great potential for them to work together on reducing greenhouse gas emissions and adapting to climate change.
  - the **Blackmoor estate** was an early adopter of a carbon footprint exercise, using a carbon calculator to measure the greenhouse gases produced by use of electricity, diesel, fertilisers, sprays etc. set against solar power and sequestration from woodland, grass margins, verges etc. With its substantial amount of woodland and its fruit orchards it is a good example of an estate that is already carbon negative;
  - **Applegarth Farm** provides an example of "urban farming", using aeroponic towers (an idea imported from the US) to grow food upwards not outwards with minimum use of land and water, no pesticides and herbicides and minimal carbon. The farm produces food, which is sold and eaten locally so there are virtually no carbon miles involved in the business. Aeroponic towers are an example of an innovation, which is highly scalable, but there are no incentives for such innovations at present.
  - the **Cholderton estate** on the Hampshire/Wiltshire border has been trialling the Environmental Land Management Scheme that the Government will introduce from

2024. The estate has demonstrated how its possible to run a profitable mixed farm while providing clean water to the aquifer, restoring microbial healthy soils and using no inorganic fertilisers or pesticides. The result is good quality food, 148 tons of carbon per hectare sequestered and one of the richest landscapes for biodiversity in the country

- iii. there are also an increasing number of excellent examples of volunteers being mobilised locally to tackle the climate emergency and improve the environment. For example,
  - the Petersfield Tree Location Survey by the Petersfield Society, supported by Forest Research, was published during our work. It provides an impressive example of a community and volunteer led initiative to map publicly owned sites with potential for new trees in Petersfield. Nearly 430 sites mainly along residential roads were identified as having potential, together with many areas of public green space. The scheme follows on from the 2017 Tree survey of the stock of trees in Petersfield. It is highly replicable;
  - Petersfield Climate Action Network (PeCAN) provides another example of how local people can get involved – in this case campaigning for reduced mowing of roadside verges to help pollinators. EHDC have this year reduced mowing frequency on Petersfield’s urban and semi-urban verges, from nine to four or five mowings. This has resulted in many species of pollinator plants flowering throughout the year”; and
  - as part of the Alton Climate Action Network, the Alton Local Food initiative has produced a Directory of 40 local veg box schemes, shops, farm shops and markets selling local food and drink – all designed to encourage people to buy more local produce.
- iv. although East Hampshire is heavily wooded, particularly on the Hangars and parts of the South Downs, there is clearly scope to do more. 10 per cent of existing woodland is in the process of being lost as a result of ash dieback and new housing and business developments pose regular threats to established trees. Some of the more urban areas are surprisingly short of trees. According to the Petersfield Tree Survey in 2017, for example, Petersfield itself has only 15 per cent tree coverage, just below the national average (and well below cities like Birmingham, which has 23 per cent tree coverage). Some of the 60s and 70s housing developments are particularly short of trees and green spaces; and even in new developments commitments to creating a green environment are sometimes not properly delivered or enforced. Indeed it is arguable that planning authorities in the past have been neglectful of building green infrastructure into new developments. Even today, while the South Downs National Park has a landscape-led, eco-systems approach built into its planning system, EHDC does not.

## **Our conclusions and recommendations**

Our single most important conclusion is that despite some progress there is not yet enough focus on climate change mitigation or adaptation: neither in policies affecting land use and agriculture nor in the actions being taken on the ground by public authorities, farmers and landowners, businesses and individuals. We particularly need more action and we all need to play our part.

We propose **five priorities for action**:

- **a much more effective Government strategy for how land use, agriculture and planning can contribute to reducing greenhouse gases;**

- a major drive to persuade **more farms to adopt and use practices**, which reduce greenhouse gases including emissions of methane, but within a policy framework which promotes sustainable, productive and profitable enterprises;
- a **very large increase in tree planting and establishment** coupled with better woodland management, including greater protection and conservation of existing trees;
- **consumers who are better informed** about the carbon footprint of different kinds of food, and the importance of buying more local and British produce and of reducing food waste.
- **better education, information and communication** to mobilise the whole community to support these priorities.

## Action for Government

There are many things Government needs to do to convert its many commitments and strategies into action, but we have focussed on **five specific asks of Government**.

### 1. Financial support for farmers and other users of land to convert to low carbon practices

**Farmers need as much clarity as possible about the new grants framework post 2024 so that they can begin to plan and take action now.** There should be incentives now for land use practices which reduce emissions, rewards for early adopters of new practices, support for innovations in low carbon food production and specific support for practices like regenerative farming and for conversion to tree-based husbandry. We also think that farmers could generate more of their own electricity through solar panels on farm buildings and unused land and through wind turbines; and also contribute to community and other local renewable energy initiatives. But if farmers are to make long term investments and major changes of direction, there must be guarantees of long-term sustainable funding, not one-off grants. This can be done, as is demonstrated by the recently announced England Woodland Creation Offer, a new grant scheme, introduced ahead of the full framework being in place to encourage farmers to adapt their land to woodland.

### 2. A level playing field

**There must also be a level playing field for UK farmers, so that they are competing on a fair basis with foreign producers with lower emissions' standards. We ask the Government to give more serious thought to what can be done in trade negotiations to make the impact on climate change a higher priority.** However difficult, it cannot be acceptable – indeed it is totally counterproductive – to incentivise higher standards from U.K. farmers, while making it easier to import cheap food from countries with lower standards of emissions.

### 3. Education, information and support

**A complete overhaul of current advice, education and support is essential.** We want:

- **farmers to have the best possible advice on how to make their farms carbon neutral.** Every farm should be incentivised to undergo a carbon footprint assessment, supported in drawing up plans and encouraged to join a farm cluster to share knowledge

and experience. Research on latest best practice in low emission farming needs to be more easily accessible. There is a particular need to build a network of woodland advisers (on the model of the Forestry Commission's woodland creation officers) to help farmers identify land for forestry, including agroforestry and the development of trees as a crop;

- **consumers to be better informed about the climate impact of the food they are eating** with specific support for local initiatives to promote local produce, to encourage consumers to buy British and to reduce food waste; and
- **the public generally to have easier access to some simple guides to the action they can take in their own gardens and in local communities and green spaces.**

#### 4. Planning

**Planning policy needs to be revisited to put achieving net zero at the heart of planning decisions on land use and development and to emphasise the importance of creating green infrastructure both in existing and new urban settings. We suggest this starts with a reconsideration of the revised National Planning Policy Framework, published in July 2021,** climate change per se is only occasionally mentioned in its 75 pages of detailed prescription. We also welcome the recently announced pause in the Government's wider planning reforms and hope that, among other things, this will result in greater emphasis on climate change mitigation and protection against housing developments for grade 1 agricultural land and land designated for ecosystems services.

#### 5. Local Government

We comment below in relation to East Hampshire that, unless there is leadership from local government, much of what is needed to transform the green spaces in our towns and countryside and to energise local communities and individuals to take action will not happen. At present, as the National Audit Office commented in July, "*there are serious weaknesses in central government's approach to working with local authorities on decarbonisation, stemming from a lack of clarity over local authorities' overall roles, piecemeal funding, and diffuse accountabilities.*" **We urge the Government, therefore, to put this right by placing a statutory duty on local authorities to take action on climate change in every aspect of its work, providing the necessary financial support to make this possible and establishing an accountability framework so that we can all tell whether our own local authorities are making progress or not.**

#### Action in East Hampshire

There is a great appetite among the residents of East Hampshire to understand what they can do in their own lives – as citizens, householders, gardeners and consumers – to contribute to reducing their own impact on the climate. But information and advice is limited or not easily accessible or both; and it can be difficult to relate the big national and international debates to our own lives. We propose a major drive in East Hampshire, led by our local authorities to demonstrate the practical action, which everyone can take. Our three priorities for local action are as follows:

##### 1. A community effort to plant many more trees

**Our top priority is for East Hampshire District Council (EHDC), to engage organisations and individuals across the District – town and parish councils, schools, voluntary and church groups, businesses and householders – in a community effort to plant more trees on both private and public land.** It is the most practical step we can take locally to reduce carbon and to get everyone involved in action that directly benefits the climate. There is no downside in planting more trees provided they are of the right type and in the right place. Trees, especially in woodlands, store carbon, provide shade against extreme temperature, support important habitats for wildlife and help create a green and pleasant environment. The Petersfield Tree Location Survey has demonstrated that our urban areas, like Petersfield, have plenty of scope for planting more trees on public land. But we believe there are many others – private landowners and farmers, businesses and householders with gardens – who could also do more. We particularly want to see local landowners taking the lead in using the Government's new Woodland Creation Offer to create new areas of woodland.

## **2. Buying local, reducing waste**

**We propose a major local campaign to persuade people to buy more locally grown food and to reduce food waste.** This requires a partnership of local authorities and public agencies, local businesses and producers and local voluntary bodies, like Hampshire Fare. We need public agencies, including schools, colleges and local authorities, and local businesses to use local produce in their canteens and restaurants; local shops and supermarkets to give much more prominence to local produce and to celebrate local food producers; and a war on food waste, including the introduction of food waste collection destined for composting or biofuel facilities in the area.

## **3. Engaging the local community**

**We would like to see every town and parish council, as some already are, leading community initiatives to get everyone involved in action to** mitigate climate change and improve biodiversity in their own gardens and green spaces. This would involve some or all of the following: planting more trees and hedgerows on local green spaces, reducing tarmac and hard standing in drives and car parks; planting more pollinators in gardens, window boxes and balconies; producing our own compost; collecting rainwater; switching to electric tools and mowers; reducing mowing of churchyards and recreation grounds; leading a “peat free” campaign in every town and village; protecting our mature trees; and phasing out the use of pesticides.

## **A leading role for EHDC**

None of the above is likely to happen at sufficient scale without the support of EHDC, Hampshire County Council and South Downs National Park Authority. There is a particular need for leadership from EHDC. It is the organisation locally that has the authority, the resources and the powers to build partnerships, to enthuse local people and to ensure that climate change mitigation and adaptation becomes a top priority throughout the District. EHDC has already taken the first key steps by declaring a climate emergency, drawing up a climate strategy and making specific commitments, for example on tree planting. But it now needs to step up a gear, to convert its good intentions into action and to provide the leadership, which is so badly needed. If it does, it will find many willing participants ready to help and supplement the resources of the Council.



There are many roles that local authorities play, some statutory, some discretionary. But in relation to land use and agriculture **we ask the Council to focus on four key issues:**

- a. **A dedicated resource in the Council.** At present there is just one person in the Council working solely on climate action and for only two days a week. That is clearly not enough to carry forward the substantial agenda in this and other reports. **We, therefore, ask the Council to create a dedicated climate change team to become the focal point for climate change action.**
- b. **A community hub and information point.** We have commented throughout this report on the need to provide clear and accessible advice and information to the public and to consumers. **We, therefore propose that the EHDC, working with other public agencies (like Hampshire County Council and South Downs National Park Authority) and voluntary organisations like Hampshire Fare and community and voluntary groups, establishes an online information and advice forum to provide some simple tips and advice on the action which individuals can take to mitigate and adapt to climate change.** This could, of course, go wider than the issues covered in this report. But from the perspective of the land use and agriculture action group, our priorities for the hub would be to inform consumers about local produce and to provide simple tips for gardeners and local communities.
- c. **Tree planting.** We describe above our proposal for a community wide initiative, led by EHDC, to plant more trees. **We would like to see it planting more trees on its own land, restricting the casual felling of trees, supporting community tree planting initiatives with small grants and increasing the number of tree officers, so that they can be active leaders of this initiative as well as protecting existing trees. A true community wide effort could achieve a target many times higher than EHDC's current target for planting trees.**
- d. **Planning a greener infrastructure.** This is about more than just planting trees, important as that is. **The Council must use its influence as a landowner and planning authority to promote a greener infrastructure in urban areas. A key step would be to adopt the same landscape-led, climate sensitive approach to planning as the South Downs National Park Authority.** We strongly believe that all our towns can be greener and, in becoming so will not only contribute to reducing greenhouse gases, they will also be cooler and pleasanter environments.

## Conclusion

We have three final thoughts. First, effective land use is not the problem, it is part of the solution to greenhouse gas emissions. It must, therefore, be a central part of a net zero strategy, whether at national or local level. Secondly, this is not just about farmers. We all interact with the land in some way, owning and living on it, using it for leisure purposes, enjoying the beautiful environment it creates, growing and eating the food it produces. We all, therefore, have a responsibility to use it wisely and play our part for the benefit of the climate. Thirdly, leadership – from Government, nationally, and from EHDC locally – is needed to convert good intentions into actions. We cannot emphasise enough that it is action, not words, that is now needed. If, as almost everyone now agrees, this is an emergency, then we must all step up to the challenge – not next year, not next decade, not by 2050, but now.