

An aerial photograph of a river winding through a landscape. The river is dark and occupies the right side of the frame. The left bank is covered in dense, vibrant green vegetation, including trees and shrubs. The right bank is also green but appears more fragmented with some yellowish-brown patches. The overall scene is a natural, undisturbed landscape.

6

Priority natural landscapes

Priority natural landscapes

Landscape-scale nature recovery

A focus on nature recovery across large, connected areas, rather than isolated sites, has been long recognised in Cambridgeshire and Peterborough. This is particularly the case for an area where around 80% of the land is farmed, most of which is arable crop land, and where high value nature sites are small, fragmented and only cover about 8% of the area. The case for landscape-scale restoration of nature becomes even more important when you consider that Cambridgeshire and Peterborough is one of the fastest growing areas in the country in terms of population growth and new development, and that there aren't large areas of accessible downland, forest, moorland or coast. The impacts from climate change and the urgent need to provide space and connectivity for species to adapt and move further supports this landscape-scale approach.

However, a landscape-scale approach to nature restoration must also align with our continuing need to grow food and provide the

homes, employment sites and other infrastructure we need.



In an intensive agricultural landscape with rapidly growing towns and cities and where high value nature sites are highly fragmented, a landscape-scale approach to nature restoration must be highly focused to be effective in the short-term and to target scarce resources to those areas where the greatest biodiversity benefits can be achieved.

Application of the Lawton principles in Cambridgeshire and

Peterborough will look very different to other parts of the country with greater land cover or concentrations of nature sites. Here, the first step is to rebuild our core biodiversity hotspots. We don't have areas with extensive and well-connected habitats such as the Brecks, the Chilterns, or Broads. Most of our best nature sites are either small and / or isolated. Our priorities for nature recovery will therefore look very different to many other parts of the country.

Nature recovery requires us to move beyond a single habitat or species focus. Even within Cambridgeshire and Peterborough there are areas where a greater concentration of nature sites has survived. In many of these there are combinations of remnant habitats whether woodlands, meadows and ponds; or chalk grasslands and scrub; or fens, wet grasslands and wet woodland. These combinations of habitats all in proximity to each other have the potential to support higher levels of biodiversity than blocks of single habitats.

Did you know?

The Ouse washlands were created 360 years' ago to retain winter flood water from the Ouse.



Identification of priority natural landscapes

In 2000, the Cambridgeshire and Peterborough Biodiversity Partnership identified those areas of Cambridgeshire and Peterborough where the highest concentrations of habitats survived, and which represented the variety of landscapes and habitats across the area.

These were refined by Natural Cambridgeshire into six priority landscapes¹ for landscape-scale nature recovery to deliver the Cambridgeshire and Peterborough doubling nature vision:

Natural Cambridgeshire Priority Landscapes

Each of these areas is briefly described below

Connected fens

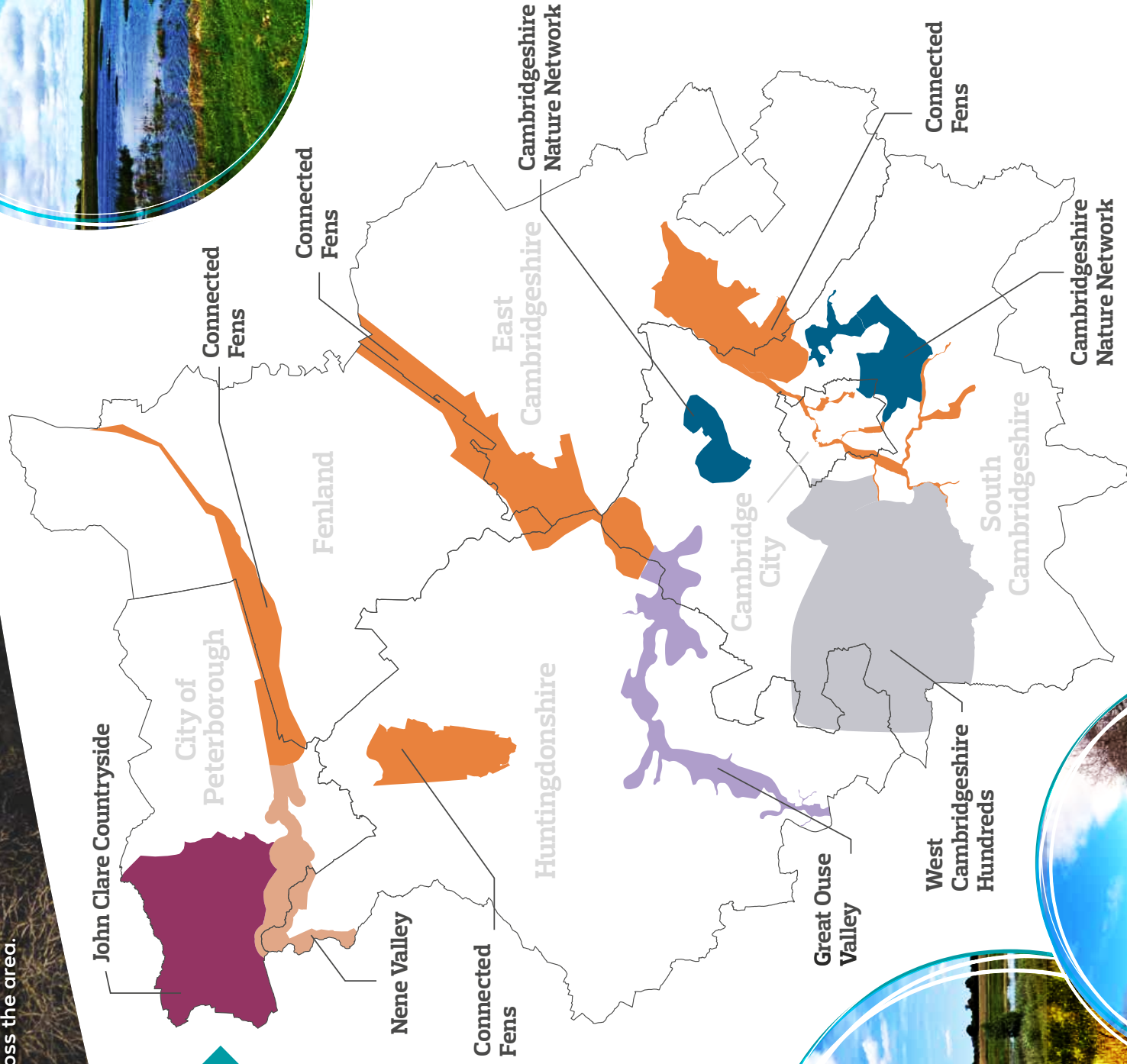
The area of internationally important remnants of ancient fen and washland habitats that now cover less than 1% of the Fens. They include the richest areas of habitat locally, supporting many rare and iconic species. Major restoration is planned and taking place in the Great Fen, Wicken Fen and Ouse Washes areas.

John Clare Countryside:

An area of ancient woodland, species-rich limestone grasslands and wetlands, supporting the richest array of species beyond the fen sites and connecting to the large Rockingham Forest area in Northamptonshire to the west.

Nene Valley

An area of remnant flood meadows and other wetland habitats from the city of Peterborough upstream to the large wetlands along the Northamptonshire Nene.



West Cambridgeshire Hundreds

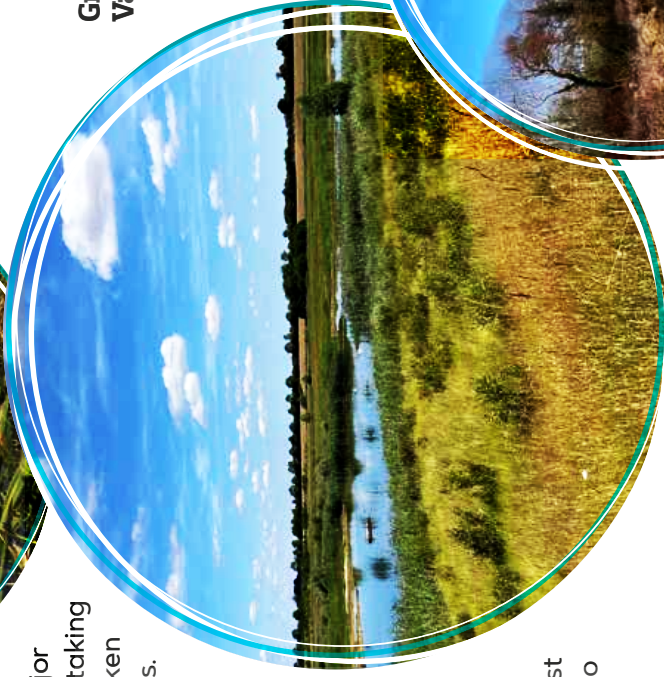
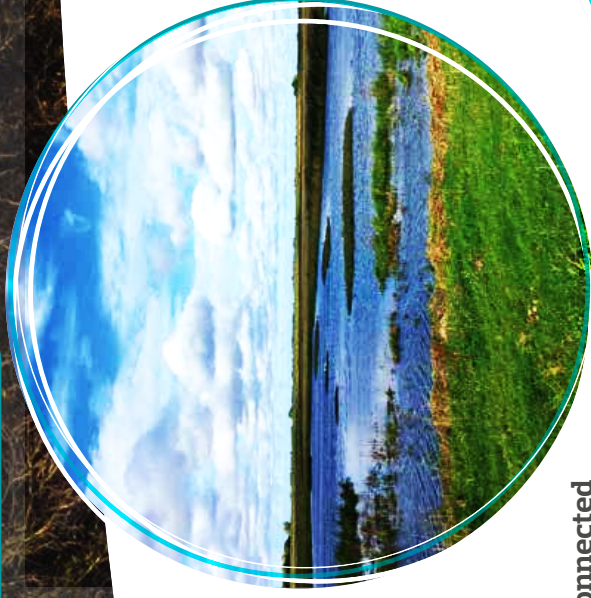
The ancient woodlands and parklands west of Cambridge to the Bedfordshire border with populations of iconic plants and invertebrates with restricted distributions in England.

Cambridge Nature Network

The area of downland, fen and wooded farmland around Cambridge and the river Cam and its chalk stream tributaries extending into Essex.

Great Ouse Valley

An extensive area of floodplain meadows, former sand and gravel pits and other wetlands supporting a rich array of plants and nationally important numbers of waterbirds. It connects the Ouse Washes to the Great Ouse in Bedfordshire.



While these six landscapes form the top priorities for nature recovery when viewed at the county or regional scale, they are still relatively isolated from each other and similar areas within neighbouring counties. To help create a national nature recovery network these will need to connect with other biodiversity hotspots. Nationally, nature recovery will connect from the English Channel to the north of Scotland and from the Wash to West Wales.

Therefore, landscape-scale nature recovery in Cambridgeshire and Peterborough will also need to take place within other areas between the

six priority landscapes. The Wildlife Trust has worked with district councils and other partners to identify additional priority landscapes to focus nature recovery at the district-scale and as a result, further refined the boundaries of the Natural Cambridgeshire Priority Landscapes.

The detail is set out in reports for the Cambridge Nature Network², East Cambridgeshire Interim Nature Network³, Fenland Interim Nature Network⁴ and Huntingdonshire Interim Nature Network⁵. Separate unpublished mapping studies have been undertaken for the Great Ouse Valley and John Clare Countryside following the same principles.

The aim of these nature network studies was to:

- 1** Identify priority areas for landscape-scale action to support nature's recovery, from both desktop analysis and targeted fieldwork
- 2** Agree the boundaries of the priority landscape areas through stakeholder engagement with key stakeholders and a sample of major landowners
- 3** Identify the critical components of a nature recovery network in each of the priority areas, based on the Lawton Principles



These nature network reports include a detailed analysis of the nature recovery opportunities in each of the priority natural landscapes. The aim within each area is to create or restore at least 30% of the landscape to high value nature sites, with these set within a wider landscape of nature friendly farming. In all but one or two of the priority natural landscapes, farming would continue to be the dominant land use. Creating or restoring land to achieve 30-40% high value nature sites in each of these priority

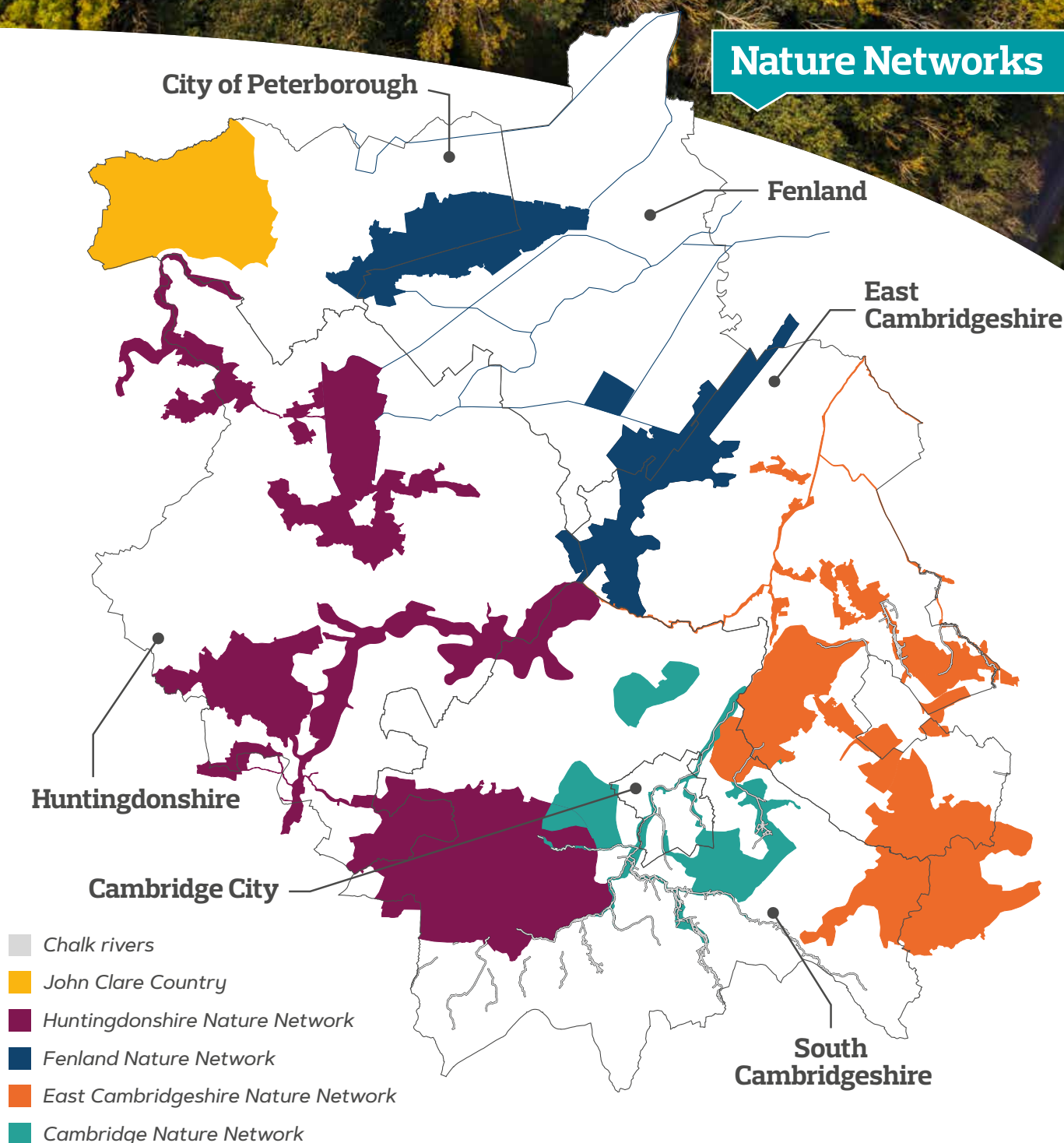
natural landscape areas would achieve the Cambridgeshire and Peterborough doubling nature vision target for 16% of the Cambridgeshire and Peterborough land area to be high value nature-rich habitats.

Combining the Natural Cambridgeshire six priority landscapes with the district priority natural landscapes produces a coherent, long-term nature network map for Cambridgeshire and Peterborough to support nature recovery at scale.



A long-term nature recovery network for Cambridgeshire and Peterborough

Nature Networks



These priority natural landscape areas provide a focus for delivery of long-term nature recovery in Cambridgeshire and Peterborough and for targeting investment in the natural environment, whether agri-environment schemes, private natural capital finance or other public funds. They also highlight those areas where BNG and offsetting would be best focused.

Within these priority natural landscape areas, partners are undertaking more detailed nature recovery opportunity mapping to identify the best areas for habitat creation and restoration. In some locations, specific areas and sites have been identified and agreed in dialogue with landowners. These have been integrated into the LNRS local habitat map.



Beyond the priority natural landscapes

Although creation of high-value habitats might be focused within priority natural landscapes, there are opportunities for nature recovery across our farmed and urban landscapes. Action to support nature recovery can occur anywhere and be undertaken by anyone.

Creating more nature friendly farmed landscapes and urban areas is an essential part of nature recovery, as it provides space for many species to move between high-value habitats and in response to climate change. As most of our area will remain farmed or be part of the growing urban areas, it is important that these areas are as hospitable to wildlife as possible.

Nature recovery on our farmland

Nature recovery on our farmland

80% of Cambridgeshire and Peterborough is farmed and over 70% of the land is arable. Agriculture will remain the dominant land use across our area. Even in our priority natural landscapes, where increased cover of high value habitats is essential for nature recovery, farming will remain the dominant land use. However, all farms, can play an active role in nature recovery. Many farmers are already doing this, though much more could be done, with the right incentives, encouragement and information.

Did you know?

80% of Cambridgeshire and Peterborough is farmed and over 70% of the land is arable.

A more nature-friendly farmed landscape is essential to support more, bigger and better high-value natural habitats. Nature friendly farming would help provide connectivity between core local nature sites as well as support those species that depend on the farmed environment.

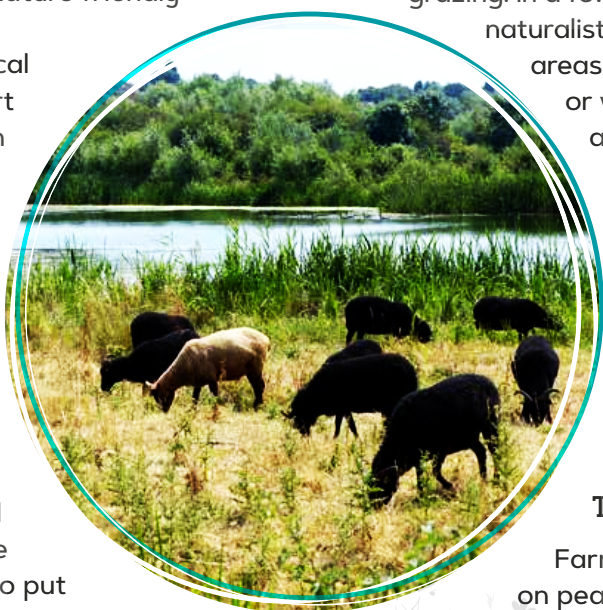
In Cambridgeshire and Peterborough, the widespread adoption of nature friendly farming practices, for example putting unproductive or less productive parts of fields down to field margin habitat options, is an integral part of nature recovery. If the majority of farms were able to put

7-10% of their farm into wildlife friendly options, the decline in many species whether invertebrates, plants or birds could be reversed. While this will not be possible on all farms, even 3-5% cover of field margin options will start to make a difference.

Regenerative forms of agricultural aimed at improving soil health complements nature-friendly farming and will often be undertaken on the same farm. Some farmers will choose an organic approach or adopt agro-forestry principles.

Nature recovery across the farmed landscape will involve a variety of approaches. Most farmers will continue with intensive production but help nature recovery with on-farm actions such as nature-rich field margins, headlands, hedgerows or ditches. Other farmers may transition towards agro-ecological production that prioritises nature recovery and soil health. Some may integrate wildlife-rich grassland habitats with conservation grazing. In a few areas, land may transition to naturalistic grazing or more extensive areas of new grassland, wetland or woodland habitats. All these approaches complement each other at the landscape scale to ensure continued farming and food production plays its part in nature recovery.

Nature friendly farming will take different forms in the different landscapes that make up our area.



The Fens

Farms in The Fens are generally on peat or organic-rich soils with

networks of drainage ditches to manage water. The ditch systems and pumping are used to lower water levels in the fields to allow arable crops to be grown, and at other times to provide water for irrigation during the crop growing season. Much of the land is at or below sea level requiring the water to be pumped into the main drains that take the water to the Wash.

The landscape has few other nature rich habitats beyond the internationally important wetlands, though there are small woods, pockets of grassland, and networks of fen droves. The ditch system provides a connected habitat network across the whole fens landscape. Some parts of this network are rich in aquatic wildlife and relic fen species; however, this is limited to those ditch networks where the water is clean, often arising from underlying gravels, chalk or peat soils. The water quality in much of the ditch network is poor and supports a low diversity of aquatic species; however, Water Voles are present in nationally important numbers across the internal drainage board (IDB) ditch network, irrespective of water quality.

Climate change and sea level rise with flooding risks from rivers and the sea, combined with the potential for increasing droughts present major challenges to the future of farming. The continued loss of peat soils with the resultant carbon emissions are also a major challenge. Nature recovery can be part of the response to these challenges.

Drains are conduits and channels providing stepping stones to nature sites between larger nature areas such as the Ouse and Nene Washes, as highlighted in the Great Fen Project. The provision of buffer areas around nature adjacent to the main drains and ditches will assist with the following nature friendly farming options:

- provision of grass or wildflower field margins along ditch networks to reduce agricultural run-off in the ditches and improve water quality. All ditches should have at least a 2-metre margin from the top of the bank.

- management of the ditch network, to create areas that hold water all year round and have a mixture of shallow margins to support wetland plants and steeper sides for Water Vole to burrow into.
- creation of small areas of wet grassland or willows in unproductive field corners.
- creation of small wetlands in strategic locations close to pumping sites or farm reservoirs to filter and clean water and provide small habitat stepping stones across the landscape.
- clusters of farms working together to build farm reservoirs to provide water for farming operations and reduce impacts on water supply elsewhere. These can be designed to include at least one shallow margin suitable for wetland plants and provide habitat for wetland birds and invertebrates.
- adoption of alternative forms of cropping such as wet farming (paludiculture).



The Claylands

The Claylands in the west and south of the area were largely grassland or mixed farming until the 1930s. However, today arable farming is dominant with small areas of pasture still present. Areas of species-rich grassland are limited to isolated fields and road verges.

These areas are the most wooded parts of our area and in some parts, there are networks of hedgerows, though many are often thin, gappy and with sparse cover at their base, reducing their value to breeding birds.

Most ponds in the area are within the Claylands and support species such as Great Crested Newt.

The installation of under-soil drainage networks in the twentieth century helped the transition from pasture to arable farming.

However, this, together with straightening and deepening of rivers and streams has contributed to flooding downstream.

Nature friendly farming options for the Claylands include:

- better management of hedgerows to create tall, thick hedgerows, with dense cover at the base and buffers of wide grass or wildflower field margins. Some hedgerows may contain trees.
- restoration and creation of networks of hedgerows to connect clusters of woodland.
- creation of networks of wildflower rich grassy field margins and headlands on less productive or unproductive parts of fields. Incorporation of areas of wild bird seed mixes, pollinator mixes and legume-rich crops.
- creation of wide habitat buffers to watercourses and where possible reconnecting rivers to their floodplains and creating more natural river profiles.
- restoration or creation of ponds, ideally as clusters of two or three ponds.
- natural flood management to slow the flow and improve water quality before it reaches the main rivers. Actions include leaky dams across ditches, creation of small wetlands and water retention basins, planting of hedgerows or grassland buffer strips across slopes, sowing winter cover crops and reducing soil compaction.
- creation of small copses as stepping stone habitats, including tree and woodland planting along ditches and streams as part of natural flood management.
- buffering ancient woodlands with wide flower rich field margins or headlands and allowing some of these to become a mix of flower rich grassland and scrub.



Rare arable plants occur across the landscape but often associated with farms that include some less intensively cropped areas. Farmland birds associated with open landscapes occur in good numbers where farms include all year-round feeding opportunities.

Fields are generally large and where hedgerows are present, they are usually relatively recent, low growing, and thin with sparse cover at the base.

Small planted farm woodlands occur across parts of the landscape but are rarely more than 100-150 years old. Most are unmanaged and do not support the areas of open space, dense shrubby growth or deadwood that most specialist woodland species depend on.

Nature friendly farming options for the Chalklands include:

- management and creation of varied wildflower rich and grassy field margins across the farmed landscape and adjacent to remnant chalk grassland sites such as road verges or chalk pits.
- creation of cropped but unsprayed headlands and wide field margins for rare arable plants.
- planting of areas with wild bird seed mixes, pollinator mixes and legume-rich crops.
- creation of areas of dense scrub on less productive land across the landscape. Pockets of scrub are likely to better support species such as Turtle Dove than hedgerows in this landscape.
- creation of wide habitat buffers along chalk streams and around spring sources and where possible reconnecting chalk streams to their floodplains.
- creation of more permanent ponds where pockets of clay are present. Water sources are important for wildlife including priority species such as Turtle Dove.
- creation of temporary ponds for specialist species of this rare habitat.
- management of farm woodlands to create more varied woodland habitats including open space, dense shrubby growth and increases in deadwood.

The Chalklands

There is a long history of arable farming across the Chalklands in the south of the area, though mixed farming was the norm before World War Two. Today arable farming is predominant, with only a few mixed arable and livestock farms.

Species-rich grasslands are now restricted to non-farmed land such as ancient monuments, former chalk quarries and road verges.

Nature recovery in our cities, towns and villages

Within our cities, towns and villages are networks of public open spaces. Some of these may lie within a priority natural landscape, while others lie outside, but all provide space for people to interact with nature. In some towns and villages, they provide the only access to nature within walking distance for those who live there.

Local councils recognise the environmental importance of their open spaces. Some may be natural greenspaces while others are primarily used for recreation but may have wilder corners. Urban natural greenspaces are often managed with community groups. Parish councils also manage small open spaces under their control. There are significant opportunities to work with local people and community groups to achieve more for nature across our public parks and open spaces.

Did you know?

You don't have to do everything at once – even small changes can bring big benefits.

There are many private gardens across our towns and villages which potentially provide a haven for urban wildlife from foxes and hedgehogs to garden birds, frogs and insect pollinators such as bees. Everyone can garden for wildlife, whether it is in a detached house with large garden, in a typical modern housing estate small garden or in window boxes in flats. Imagine if 30% of private gardens in Cambridgeshire and Peterborough were managed with wildlife in mind, it would equate to an area slightly larger than the Nene and Ouse Washes combined or similar area to the whole of the Great

Fen. The Climate Change Gardening Group has a range of informative tips to help local residents mitigate against climate change and decline in biodiversity. You don't have to do everything at once – even small changes can bring big benefits.

The public open spaces and gardens provide the basis for the “urban forest” and are supplemented by street trees and road verges. As temperatures continue to rise there is a need for much greater “urban greening” with increased tree and vegetation cover to help provide urban cooling in towns, as well as the other benefits of cleaner air and improved mental health.

Buildings can also be made greener through green roofs and green walls. The incorporation of bat and bird bricks or boxes can provide breeding spaces that otherwise wouldn't exist. The use of SuDS is increasing, and these can provide space for wetland wildlife in our towns.

Actions to support wildlife include the introduction of wildflowers, pond restoration and creation, tree and hedge planting, or more wildlife-friendly mowing and hedge cutting regimes. Every parish or community can prepare their own local nature recovery plan, to guide actions in their area, within gardens, the public realm or by the farming and landowning community of their area.

There are a variety of resources such as Local Nature Recovery Toolkit and Biodiversity for All Toolkit that provide ideas and options to help people enhance their local patch. Across town and country, communities working together can play their part in nature's recovery.

