



CFE County Priorities for Norfolk

1. Aim

This document has been drawn together by the CFE Local Liaison Group for Norfolk with input from all LLG members and their respective organisations. The aim is to ensure that all advisers and partners have a clear, concise and consistent message about the aims of CFE in Norfolk that can be used by farmers and landowners to ensure their actions deliver maximum benefit to the environment. The action undertaken on each farm may differ depending on the farm type and enterprise.

2. County Overview

Norfolk's geology of young rocks gives rise to the deep fertile soils formed from glacial deposits and outwash which overlie chalk. **75% of the land area is given over to agriculture.** Far from the prevailing Atlantic weather systems, it has relatively low rainfall and high temperatures compared to much of Britain.

Norfolk covers 9 National Character Areas, but the bulk of the farmed area is in three main areas based on soil type: the claylands; North West Norfolk; and North East Norfolk.

The claylands of *Mid Norfolk* and the *South Norfolk and High Suffolk Claylands* have a history of gradual piecemeal enclosure, resulting in a patchwork of semi-regular field systems, with commons and woodland on the heavier clay plateaux and pasture in shallow valleys, and very few large estates. More recent field rationalisation has created an open landscape fringed by drainage ditches. Wheat is the predominant crop with oilseed rape as a break crop; some barley, potatoes, sugar beet and beans are also grown on less heavy land.

North West Norfolk is gently undulating with light freely draining soils. It is a predominantly arable landscape of large estates with large regular fields resulting from the late enclosure of open fields and heathland. It is only sparsely wooded with modern shelter belts and plantations for shooting purposes. Wind breaks of pine lines associated with Breckland also occur here. The lighter soils allow more diverse cropping with barley, potatoes and sugar beet.

North East Norfolk and Flegg has a flat, open character, incised by the wooded river valleys of the Broads. Piecemeal enclosure has given rise to irregular field patterns, bounded most commonly by earth banks with very few boundary trees or hedges, as the North Sea exerts its influence far inland. Deep fertile loams allow highly productive arable cropping and as a result the area has seen its fair share of field expansion. Sugar beet and potatoes are widely grown.

The remaining NCAs are distinct, well-known landscapes:

Breckland is a unique landscape type, characterised by conifer plantations and wide open fields of dry sandy soils over chalk. Much of it was heathland until large-scale twentieth-century afforestation occurred. It is dominated by a few large estates, the Forestry Commission and Ministry of Defence. Farming the light, drought-prone land requires irrigation which enables quality vegetable production; outdoor pigs are also a prominent feature.

The Broads are a drained landscape, of grazing marsh and arable land, characterised by reed-fringed rivers and man-made lakes. Livestock grazing is interspersed with arable cropping, mainly for cereals, which is supported by the moderately fertile river valley and floodplain soils. Woodland cover has expanded significantly since the 1950s, encroaching upon open habitats such as reedbed and fen to create extensive alder-carr wet woodland.

The Fens are a vast, open, drained floodplain of many rivers originating in Norfolk, Suffolk and the Midlands. They stretch into Cambridgeshire and Lincolnshire and lie at or below sea level. The Fens are dominated by flood banks, shelter belts and an ever imposing sky. Fields are generally large and rectilinear, surrounded by drainage ditches. The highly fertile peat and silt fens grow high value crops including vegetables and bulbs.

The *North Norfolk Coast* consists of a narrow stretch of salt and freshwater marshes, and a vast tidal expanse of beaches, mud flats, shingle ridges and sand dunes. This coastline is designated an Area of Outstanding Natural Beauty and comprises National Nature Reserves, Sites of Special Scientific Interest, Special Areas of Conservation and Special Protection Areas under various legislation.

In *Central North Norfolk*, the relatively high, undulating Cromer Ridge is old glacial moraine which stretches north from Norwich to the coast, separating the claylands from North East Norfolk. It could be likened to Breckland: formerly wooded commons and heaths on sandy soils have now largely been afforested or cultivated.

3. County designated sites and partnerships

- The North Norfolk Coast Area of Outstanding Natural Beauty stretches from the silt expanses of the Wash to the high boulder clay cliffs east of Weybourne, which the sea is rapidly eroding.
- Norfolk contains 162 SSSIs, the four largest of which are all also Important Bird Areas and European Special Protection Zones. There are 21 National Nature Reserves, 8 Ramsar sites, 12 Special Areas of Conservation and 7 Special Protection Areas.
- There were 1309 County Wildlife Sites and 110 Roadside Nature Reserves as of May 2013, and 5 County Geodiversity Sites.
- In addition to the formally designated sites, Norfolk contains the Breckland Environmentally Sensitive Area (ESA) and Broads ESA, a scheme introduced in 1987 to encourage the adoption of agricultural practices to safeguard and enhance parts of the country of particularly high landscape, wildlife or historic value. The ESA extends over 43,200 ha of river valley, marsh and fen in Norfolk and north Suffolk
- Norfolk has six Living Landscape Projects: Bure Valley, Claylands, Gaywood Valley, Hickling, North Norfolk Woods and Wissey.
- The Local Nature Partnership is run by Wild Anglia.

4. County Priorities

The following sections aim to define the county priorities by theme.

a) Theme: Priority farmland habitats and description

Ancient and/or species-rich hedgerows (VM13, VM17, VM19, VM20)

Cereal field margins (cultivated margins, cereal headlands, and grass buffers) – throughout the county (VM1, VM6, VM13, VM14, VM20)

Chalk streams – in North Norfolk including the Nar, Wissey, Bure and Stiffkey (VM1, VM4, VM19, VM20)

Coastal & floodplain grazing marsh - Broads, North Norfolk Coast and Wash (VM19)

Lowland dry acid grassland - Breckland, Cromer ridge, West Norfolk (VM19, VM20)

Lowland heath - Breckland, Cromer ridge, West Norfolk

Fen - Peat fringes of river valleys, and Broadland

Lowland calcareous grassland - West and North Norfolk (VM19, VM20)

Lowland meadow and pasture - Claylands, Broads and river valleys (VM19, VM20)

Eutrophic Ponds – throughout, with concentrations in the Brecks and Claylands (VM1, VM4, VM17, VM19, VM20)

Reedbed - Broadland, river valleys, Fens and North Norfolk Coast

Wood pasture and parkland (VM19)

Any specific action required:

Roadside Nature Reserves (RNRs) – over 100 throughout the county. Importantly, these form a data bank of what plants should occur locally. When re-creating habitat on farms, plants appropriate to soil type should always be selected for conservation schemes, rather than generic off the shelf seed mixes.

Cereal Field Margins – found throughout the county. Maintain an element of cultivation of margins on all soil types, except perhaps on the fertile loams of NE Norfolk, or on silts and peat. Prioritise plants of local provenance, referring to RNRs for flowering components of grass margins.

Hedgerows - restore throughout Norfolk. To maintain the diversity of the distinct, local character of areas of Norfolk, hedging plants and trees appropriate to soil type. Encourage long rotation cutting or coppice management. Delay cutting until February where possible. Prioritise green lane restoration and recreation

Lowland heathland and dry acid grassland - Brecks, West Norfolk and Cromer ridge. Restore from former forestry and farmland where possible.

b) Theme: Priority species and requirements

- **Arable plants** – as identified in the Important Arable Plant Areas of Norfolk. West Norfolk, Breckland, the Cromer Ridge and claylands are existing hot spots for arable plants. The claylands are an important stronghold for shepherd's needle (BAP). Cultivated, unfertilised plots or strips on headlands on all soils except perhaps the fertile loams of NE Norfolk, silts and peat. (VM12, VM13, VM14, VM15, VM21)
- **Invertebrates and pollinators** – Beetle banks, tussocky, species-rich and cultivated margins, hedgerows. Breckland is a core area for invertebrate BAP priority species. (VM1, VM2, VM6, VM7, VM8, VM9, VM10, VM12, VM13, VM14, VM15, VM17, VM18, VM19, VM20, VM21, VM22)
- **Farmland birds** –The Fens are a priority area for farmland birds and one of the few remaining areas where Grey Partridge, Lapwing, Corn Bunting, Tree Sparrow, Yellow Wagtail and Turtle Dove can still be found. North West Norfolk is a stronghold for Grey Partridge and other range-restricted farmland birds. The Brecks and NW Norfolk are also important areas for Stone Curlew. Farmland birds require suitable nesting habitat, insect-rich areas in spring/summer for chick feeding, and (where they overwinter) seed-rich areas throughout the winter months. (VM6, VM7, VM8, VM9, VM10, VM11, VM12, VM13, VM14, VM15, VM16, VM17, VM18, VM19, VM20, VM21, VM22)

Any specific action required:

- **Barbastelle bat (BAP)** – Priority areas north and east of Norwich. Woodland edge, green lanes, hedgerows with trees and species-rich margins. Options to reduce the impact of fertiliser and pesticide run-off helps to increase species richness and population size of micro-moths. (VM1, VM2, VM13, VM17, VM19, VM20)
- **BAP mammals species** – species specific Voluntary Measures should be considered where these are found on or adjacent to farms.

c) Theme: priority river catchments

- Catchment Sensitive Farming (CSF), a joint project between the Environment Agency and Natural England, funded by Defra and the Rural Development Programme for England, works in priority catchments within England. It delivers practical solutions and targeted support to enable farmers and land managers to take voluntary action to reduce diffuse water pollution from agriculture to protect water bodies and the environment. There is an annual capital grant scheme to help farmers and land managers make relatively low cost infrastructure investments towards this.
- The Priority Catchments within Norfolk are:
 - Bure, Ant & Muckfleet
 - Wensum
 - Nar
 - North Norfolk Rivers
 - Yare
 - Waveney
 - Little Ouse

These catchments cover over 90% of Norfolk.

- Resource protection (soil and water) is a key theme of the Campaign for the Farmed Environment, and farmers are encouraged to buffer their watercourses as a first step in both agri-environment and voluntary measures.
- River valleys in the county are typically rich in wildlife, containing a mosaic of wetland habitats supporting many rare and interesting species of plant, invertebrate and bird life. Over 1,300 pairs of wading birds (such as lapwing, redshank, snipe and oystercatcher) nest on ESA river valley land. The permanent pastures here are inherently wet, drained by a network of ditches. These areas are important for a variety of wildfowl and waders as well as other wildlife, including a diversity of wetland plants, amphibians, and otters. Areas of dry acid grassland and heathland on some valley slopes and coastal strips are also of importance, especially for their plant and invertebrate interest.
- Raise awareness of the Water Framework Directive and in particular Drinking Water Protected Area Safeguard Zones and other protected zones within the county. Raise awareness of where there are failures due to high nitrates and phosphates levels. Encourage farmers to use the Environment Agency's website: WIYBY for farmers. <http://apps.environment-agency.gov.uk/wiyby/default.aspx>

Any specific action required:

- Targeted advice on implementing relevant CFE options. (VM1, VM2, VM3, VM4, VM5, VM17, VM18, VM19, VM20)
- Where maize is grown advise on reducing erosion risks and sowing cover crops. (VM3, VM5)

d) Theme: other county priorities not already covered

Invasive non-native species pose one of the most serious threats to biodiversity worldwide, second only to habitat loss. The economic impacts of these species can also be severe. The Norfolk Non-Native Species Initiative was launched in 2008 to promote the prevention, control and eradication of invasive alien species.

Invasive non-native aquatic plants, including floating pennywort, New Zealand pygmy weed, parrot's feather, and the bankside Himalayan balsam, are becoming an increasing problem within the Broads. Mink, non-native crayfish, zebra mussel and killer shrimp are other species being tackled by the Norfolk Non-Native Species Initiative.
<http://www.norfolkbiodiversity.org/nonnativespecies/>

Deer species pose a threat to our woodland by selectively browsing woodland flora and suppressing regeneration.
http://www.thedeerinitiative.co.uk/di_in_england/eastern_england.php

Any specific action required

- Ask farmers to record non-native species. <http://www.nbis.org.uk/BroadSweep2011>
- Make farmers aware of any local initiatives to help, such as the Norfolk Mink Project. <http://www.norfolkbiodiversity.org/pdf/reportsandpublications/Norfolk%20Mink%20Strategy.pdf>, <http://www.rinse-europe.eu/farming-and-invasive-species>
- Promote sustainable deer management.

CFE options within Entry Level Stewardship agreements (excluding Uplands ELS)

		2013	2014		2015		2016 and later
			Jan-Jun	Jul to Dec	Jan-Jun	Jul to Dec	
Norfolk	Maintenance of watercourse fencing (EJ11) - km	0	0	0	0	4	12
	Supplementary feeding in winter for farmland birds (EF23) - tonnes	0	0	0	0	0	8
	Skylark plots (EF8) - number	0	0	0	0	94	846
	All other CFE2 options (hectares)	0	76	88	61	1289	5038
	<i>Permanent grassland with very low inputs: outside SDA & Moorland (EK3)</i>	0	37	30	47	529	2789
	<i>Field corner management (EF1,EK1)</i>	0	21	22	6	418	1246
	<i>Wild bird seed mixture (EF2)</i>	0	17	30	7	121	339
	<i>Nectar flower mixture (EF4)</i>	0	1	1	0	67	137
	<i>6m/12m buffer strips next to a watercourse (EE9, EE10, EJ9)</i>	0	0	0	0	78	232
	<i>Extended overwintered stubbles (EF22)</i>	0	0	0	0	27	35
	<i>Other</i>	0	0	5	0	49	260