



Borough Council of
**King's Lynn &
West Norfolk**



Habitats Regulations Assessment of Gypsy and Traveller and Travelling Showpeople Sites

September 2024

Contents

1.0	Introduction	2
2.0	Habitats Regulations Assessment Process.....	2
3.0	Stages of Habitats Regulations Assessment.	3
4.0	Consultation	3
5.0	European Sites.....	4
6.0	Assessment of Sites	7
7.0	GIRAMS	8
	Appendix A: Distance of each Proposed Gypsy Traveller and Showpeople Site from the nearest Habitat Site	10
	Appendix B: Detail on each of the Habitat Sites within King's Lynn and West Norfolk	17

1.0 Introduction

- 1.1 This document satisfies the requirement for a Habitat Regulations Assessment (HRA) of Local Plans under the Conservation of Habitats and Species Regulations 2017 (as amended). This includes the requirements relating to the sites of greatest significance and international importance for nature, for which the UK has a special responsibility: breeding and resting sites for rare and threatened species and natural habitats that are at risk. The regulations and subsequent amendments require the UK to apply the Habitats and Bird Directives (EU Legislation) on how European Sites are designated and protected.
- 1.2 Special Protection Areas (SPA) and Special Areas of Conservation (SAC) are defined in the regulations as forming a national network of 'European sites'. The Regulations regulate the management of land within European sites, requiring land managers to have the consent of Natural England before carrying out management. Byelaws may also be made to prevent damaging activities and if necessary land can be compulsorily purchased to achieve satisfactory management.
- 1.3 The Regulations define competent authorities as public bodies or statutory undertakers. Competent authorities are required to make an appropriate assessment of any plan or project they intend to permit or carry out, if the plan or project is likely to have a significant effect upon a European site. The permission may only be given if the plan or project is ascertained to have no adverse effect upon the integrity of the European site. If the competent authority wishes to permit a plan or project despite a negative assessment, imperative reasons of over-riding public interest must be demonstrated, and there should be no reasonable alternatives to the scheme. The permissions process would involve the Secretary of State and the option of consulting the European Commission. In practice, there will be very few cases where a plan or project is permitted despite a negative assessment. This means that a plan such as the Borough Council of King's Lynn and West Norfolk Local Plan must be assessed, and the assessment must either decide that it is likely to have no significant effect on a European site or ascertain that there is no adverse effect upon the integrity of the European site.
- 1.4 The purpose of this HRA is therefore to assess the proposed sites that have been identified to the needs of Gypsy, Traveller and Travelling Showpeople (GTTS) within the Local Plan, and identify if they have the potential to cause a 'likely significant effect' on Natura 2000 or European Sites. This document should be read alongside the Habitats Regulations Assessment of the King's Lynn and West Norfolk Local Plan Review (May 2021).

2.0 Habitats Regulations Assessment Process

- 2.1 A Habitats Regulations Assessment is a step-by-step process which is undertaken in order to determine whether a project or plan will have a likely significant effect (LSE) upon a European site. Before a competent authority can authorise a proposal, they must carry out an Appropriate Assessment of a plan or project in line with procedure detailed in the Habitats Regulations. The whole procedure is called a Habitats Regulations Assessment, with the Appropriate Assessment being part of one of four

stages necessary to complete an HRA. The results of the HRA are intended to influence the decision of the competent authority when considering whether or not to authorise a proposal.

3.0 Stages of Habitats Regulations Assessment.

- 3.1 Stage One of the HRA is 'Screening'. Plans, projects or sites will be investigated for their potential to have a likely significant effect upon a European site. If it is assessed that there is likely to be a significant effect, and is not connected to the management of the site, an Appropriate Assessment is required. Proposals that are found not likely to have a significant effect upon a European site will be 'screened out' at this stage and no further investigation will be required.
- 3.2 Stage Two of the HRA is the 'Appropriate Assessment and the Integrity Test'. The plan-making authority must undertake an Appropriate Assessment which seeks to provide an objective and scientific assessment of how the proposed Local Plan may affect the qualifying features and conservation strategies of European sites.
- 3.3 The UK Government accepts the definition for the 'integrity' of a site as 'the coherence of its ecological structure and function, across its whole area, that enables it to sustain the habitat, complex of habitats and/or the levels of populations of the species for which the site is (or will be) designated.' Other factors may also be used to describe the 'integrity' of a site.
- 3.4 Stage Three of the HRA is 'Imperative reasons of overriding public interest and compensatory measures'. If the Competent Authority determines that there are imperative reasons of overriding public interest notwithstanding adverse impacts upon the integrity of the European site, and there are no alternatives, the plan may be given effect. In this case, the plan-making authority must notify the Secretary of State at least 21 days before authorisation; the Secretary of State may give a direction prohibiting the plan from being given effect. It is unlikely that this stage would be reached.

4.0 Consultation

- 4.1 Natural England is a statutory consultee, and has been consulted during the drafting of this HRA. Natural England has been consulted upon previous stages of the Local Plan and HRA, and the HRA has been included in previous public consultations of the emerging Local Plan.

5.0 European Sites

5.1 European sites (also known as Natura 2000/N2K sites) are sites that have been classified or designated by the Department for Environment, Food, and Rural Affairs (Defra) or Natural England, as Special Protection Areas (SPA) for those sites where birds are the special interest feature, and Special Areas of Conservation (SAC) where the habitats or species (other than birds) are the reason for designation. The distribution of these across the Borough of King’s Lynn and West Norfolk are shown in figure 1.

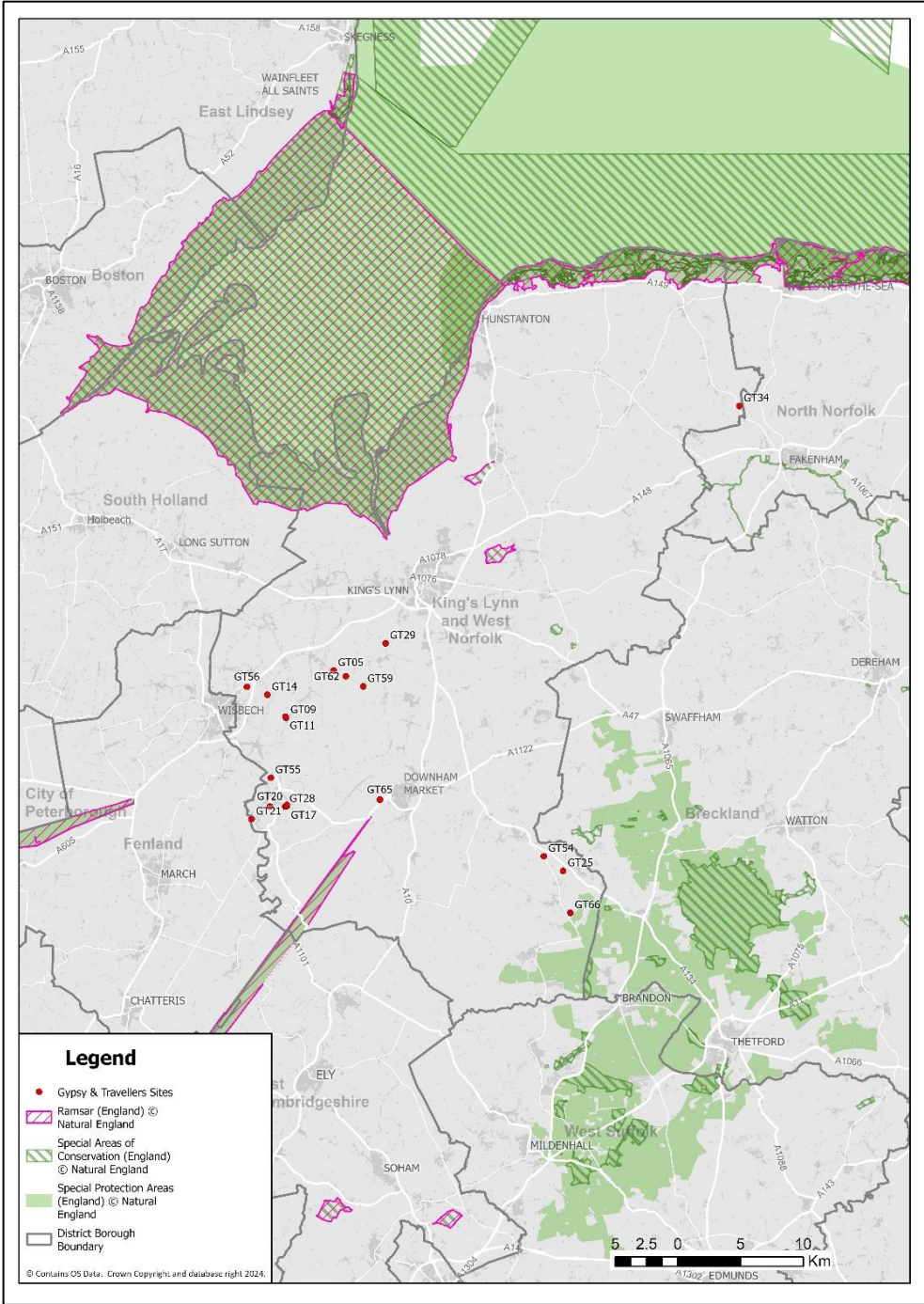


Figure 1: European sites across the Borough of King’s Lynn and West Norfolk

- 5.2 Wetlands of International Importance, designated under the Ramsar Convention, are called Ramsar sites and are designated and overseen by the International Union for the Conservation of Nature (ICUN), and are not European sites. There is often considerable overlap between the boundaries of Ramsar sites, and those of European sites. Government policy in the National Planning Policy Framework (NPPF) also requires Ramsar sites to be treated in the same manner as European sites. This also applies for sites that are being evaluated for designation, including potential Special Protection Area (pSPA), Site of Community Importance (SCI), Candidate Special Area of Conservation (cSAC) and proposed Ramsar sites. Therefore, although Appropriate Assessment only legally applies to European sites, National Planning Policy requires that all designated, or potentially designated sites, previously mentioned should be assessed. Therefore, for the purposes of this report, the term 'European site(s)' refers to all sites under assessment.
- 5.3 As can be noted in Appendix B the notable features of the Ramsar sites are usually very similar to the notable features of the SPA and / or SAC designations, both geographically and ecologically.
- 5.4 These are all large sites that contain a range of plant and animal species and their supporting habitats. There are also Sites of Special Scientific Interest (SSSI) across the area, some of which overlap with the Ramsar, SAC & SPA sites and others that are completely separate and are usually smaller in size. The impact of development on these sites needs to be assessed according to the reason for their designation i.e. if the site is a breeding ground for a species it will have a different impact risk zone identified than if it is a notable geological feature. Impact of development of these sites should also be assessed as part of the project HRA. Figure 2 depicts the SSSIs in the area along with the European sites and the proposed Gypsy, Traveller and Travelling Showpeople sites.

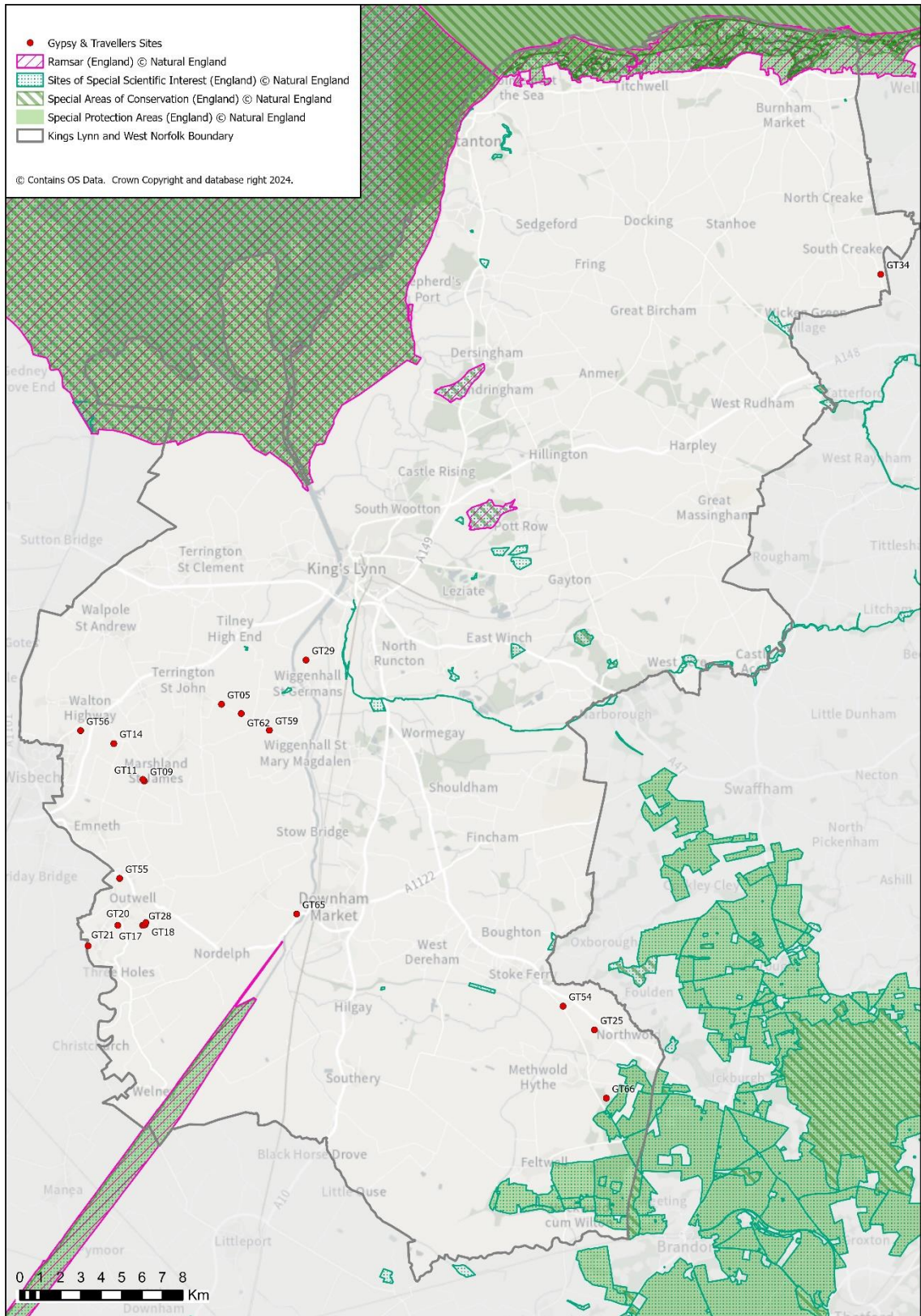


Figure 2: European Sites and the SSSIs across the Borough of King Lynn and West Norfolk

6.0 Assessment of Sites

- 6.1 A Habitats Regulations Assessment for the pre-submission Plan dated May 2021 is published on the Council's website and examines the full Local Plan. This current addendum to the HRA assesses the potential GTTS sites that have been consulted on in January 2024 and responds to the Natural England consultation response that was received.
- 6.2 The following sites will also be subject to a further consultation in May 2024 where additional comments may be received. This HRA will be amended accordingly once following the period of consultation.
- 6.3 The following sites are identified as being proposed allocations for Gypsy, Traveller and Travelling Showpeople to have pitches/plots provided through intensification, formalisation and/ or extension of current sites. These sites are being proposed to address the identified GTTS accommodation needs within the Borough for the first five years of the Local Plan period as required by National Planning Policy.
- 6.4 The sites have been subject to individual site assessments and public consultation. Where sites are constrained by issues, such as flood risk, separate evidence base reports have been prepared.

Table 1: Proposed sites for Gypsy, Traveller and Travelling Showpeople pitches/plots

Site Reference	Address	Proposed number of Pitches/Plots
Intensification and / or extension		
GT05	19 - 121 Magdalen Road, Tilney St Lawrence	1
GT09	The Stables, Marshland St James	1
GT11	Homefields, (Western Side, Goose Lane), Marshland St James	1
GT14	Land at Blunts Drove (Proposed Allocation) Social Site	4 ¹²
GT17	Land at The Lodge, Small Lode, Upwell	9
GT18	Land at 2 Primrose Farm, Small Lode, Upwell	4 ¹⁴
GT20	Land at Botany Bay, Upwell	1
GT21	Land at Four Acres, Upwell	5
GT28	Many Acres (Smithy's Field), Small Lode, Upwell, Norfolk	2
GT29	No 2 The Stables, (Rear of stables), Lynn Road, Wiggshall St Germans	1
GT34	Land at Creaksville, South Creake	1

Site Reference	Address	Proposed number of Pitches/Plots
GT54	Land at the Pines, Whittington	1
GT55	Land at Victoria Barns, Basin Road, Outwell	1
GT56	Wheatley Bank, Walsoken (South of Worzals parallel to A47)	9
GT59	Land at Spriggs Hollow, Walsoken	5
GT66	Land at Brandon Road, Methwold	1
Authorising Pitches		
GT15	Land SW of Common Road	1
GT59	Land at Spriggs Hollow, Walsoken	1
GT65	Tall Trees, (A1122) Downham Market	4 5
Sites for Travelling Showpeople		
GT25	Land at the Oaks, Northwold	2
GT62	Land at Redgate Farm, Magdalen Road, Tilney St Lawrence	2

7.0 GIRAMS

- 7.1 Norfolk Councils have developed the Norfolk Green Infrastructure and Recreational Impact Avoidance and Mitigation Strategy (known locally as GIRAMS). GIRAMS addresses the concern that residential growth, combined with an increase in tourism accommodation, will result in more people visiting and possibly harming Habitats Sites. The document provides the County with the opportunity to address mitigation strategically. As it is not possible to rule out residual effects, strategic mitigation is proposed within the document. This is in order to ensure that Local Plans can be adopted and to enable planned growth through the implementation of measures to avoid adverse effects on the integrity of Habitats Sites.
- 7.2 Gypsy, Traveller and Travelling Showpeople accommodation is considered to be a form of housing and therefore the provision of new pitches, whether by intensifying the use of an existing site or the creation of new sites, requires GIRAMS to be considered. In accordance with the requirements of GIRAMS all residential development within the Zone of Influence (ZOI) should provide a project level HRA at planning application stage.
- 7.3 GIRAMS identifies that the ZOI recreational impact from residential development on Habitat Sites covers the majority of Norfolk. In addition to this, the document identifies the Impact Risk Zones (IRZ) for Habitat Sites in Norfolk. The Habitat Sites

within the King's Lynn and West Norfolk Borough and their IRZs are identified in the table below outlining the GTTS sites that fall within them.

Table 2: Current Impact Risk Zones for Habitat Areas

Habitat Site	Current Impact Risk Zone	Sites within Impact Risk Zones
Ouse Washes SPA/SAC/Ramsar	5km	GT65 (1.5km)
Breckland SPA/SAC	8km	GT66 (0.27km); GT54 (4.07km); GT25 (2.18km)
Roydon Common SAC/ Ramsar & Dersingham Bog SAC	7km	-
The Wash SPA/ Ramsar	3km	-
The Wash & North Norfolk Coast SAC	3km	-
North Norfolk Coast SPA & Ramsar	5km	-
River Wensum SAC	4km	-
Norfolk Valley Fens	3km	GT25 (2.95km); GT54 (2.82km)

- 7.4 Further to the Impact Risk Zone, the Breckland SPA/SAC also has a 1.5km buffer zone around it. Within the buffer zone it is predicted that development would result in a significant effect on the Stone Curlews especially those that are established outside the confines of the protected areas but are a part of the population inhabiting the SPA/SAC.
- 7.5 Information relating to the proposed allocated sites and Habitat Sites that are nearest to them is in Appendix A.
- 7.6 There are further sites that lie just outside the Impact Risk Zone and should be carefully evaluated as part of the planning application process. GTTS sites GT17; GT18; and GT28 are over 5km but below 6kms from the Ouse Washes and GT34 and GT39 are under 4.5km from the River Wensum SAC.
- 7.7 The GIRAMS requires all sites to provide project level HRAs for residential developments within the Zone of Influence which encompasses all of KLWN, as outlined within GIRAMS guidance¹. It is recommended that the sites within or close to Impact Risk Zones (IRZs) i.e. those specifically mentioned above in Table 2 and in Paragraph 7.6, provide a bespoke HRA addressing the possible impacts of the development regardless of its scale as part of a detailed planning application.

¹ [GIRAMS guidance note May23.pdf](#)

Appendix A: Distance of each Proposed Gypsy Traveller and Showpeople Site from the nearest Habitat Site

Site Name/Settlement	19 - 121 Magdalen Road, Tilney St Lawrence	Site Reference	GT05
Site Capacity	Some remaining capacity	Site Area (Ha)	0.23
Proposed Number of additional pitches/plots	1	Ownership	Private
Nearby Habitat sites	The Wash & North Norfolk Coast SAC The Wash Ramsar /SPA The Wash NNR	Distance	11.26km 11.26km 11.08km

Site Name/Settlement	The Stables, Gooses Lane, Walpole St Andrew	Site Reference	GT09
Site Capacity	Some remaining capacity.	Site Area (Ha)	0.26
Proposed Number of pitches to be authorised	1	Ownership	Private
Nearby Habitat sites	The Wash NNR/ Ramsar/SPA Ouse Washes Ramsar/SAC Ouse Washes SPA Wiggenhall St. Germans SSSI	Distance	16.26km 10.36km 11.9km 7.99km

Site Name/Settlement	Homefields, (Western Side, Goose Lane), Walpole St Andrew, (Homefield)	Site Reference	GT11
Site Capacity	Some remaining capacity	Site Area (Ha)	0.21
Proposed Number of additional pitches/plots	1	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA Ouse Washes Ramsar/SAC/SSSI Ouse Washes SPA Wiggenhall St. Germans SSSI	Distance	16.24km 10.46km 11.99km 8.02km

Site Name/Settlement	West Walton Court, Blunts Drove, Walton Highway	Site Reference	GT14
Site Capacity	Some remaining capacity	Site Area (Ha)	1.34
Proposed Number of additional pitches/plots	12	Ownership	Private/ Public
Nearby Habitat sites	Ouse Washes Ramsar/SAC/SSSI	Distance	12.62
	Ouse Washes SPA		12.62
	The Wash NNR		14.42
	Nene Washes SPA		13.32
	Islington Heronry SSSI		7.85

Site Name/Settlement	Land SW of Common Road, Walton Highway	Site Reference	GT15
Site Capacity	Some remaining capacity	Site Area (Ha)	1.34
Proposed Number of additional pitches/plots	1	Ownership	Private/ Public
Nearby Habitat sites	Ouse Washes Ramsar/SAC/SSSI	Distance	12.62
	Ouse Washes SPA		12.62
	The Wash NNR		14.42
	Nene Washes SPA		13.32
	Islington Heronry SSSI		7.85

Site Name/Settlement	The Lodge, 196 - 198 Small Lode, Upwell (The Caravan Site)	Site Reference	GT17
Site Capacity	Limited remaining capacity, but more with Broad Location	Site Area (Ha)	2.23
Proposed Number of additional pitches/plots	9	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA	Distance	22.44km

	Ouse Washes Ramsar/SAC/SSSI Ouse Washes SPA		5.83km 5.87km
--	---	--	------------------

Site Name/Settlement	Primrose Farm, Small Lode, Upwell	Site Reference	GT18
Site Capacity	Limited remaining capacity, but more with Broad Location	Site Area (Ha)	2.17
Proposed Number of additional pitches/plots	14	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA Ouse Washes Ramsar/SAC/SSSI Ouse Washes SPA	Distance	22.37km 5.87km 5.93km

Site Name/Settlement	Botany Bay, Stonehouse Road, Upwell	Site Reference	GT20
Site Capacity	Some remaining capacity	Site Area (Ha)	0.19
Proposed Number of additional pitches/plots	1	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA Ouse Washes Ramsar/SAC/SSSI Ouse Washes SPA		23.06 6.92 6.92

Site Name/Settlement	Four Acres, March Riverside, Upwell	Site Reference	GT21
Site Capacity	Some remaining capacity	Site Area (Ha)	01.49
Proposed Number of additional pitches/plots	5	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA Ouse Washes Ramsar/SAC/SSSI/ SPA	Distance	24.4km 7.49km

Site Name/Settlement	The Oaks, Mill Drove, Northwold	Site Reference	GT25
Site Capacity	Some remaining capacity	Site Area (Ha)	0.32
Proposed Number of additional pitches/plots	2	Ownership	Private
Nearby Habitat sites	Breckland SPA/SAC	Distance	2.18km
	Norfolk Valley Fens SAC		2.95km
	Ouse Washes Ramsar/SAC/SPA/SSSI		15.87km
	Weeting Heath NNR		7.05km
	The Brinks SSSI, Northwold		1.95km

Site Name/Settlement	Many Acres (Smithy's Field), Small Lode, Upwell, Norfolk	Site Reference	GT28
Site Capacity	Some remaining capacity	Site Area (Ha)	0.36
Proposed Number of additional pitches/plots	2	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA	Distance	22.56
	Ouse Washes Ramsar/SAC/SSSI/SPA		5.94

Site Name/Settlement	The Stables, Wiggnehall St Germans	Site Reference	GT29
Site Capacity	No remaining capacity and no prospect of an extension to the site	Site Area (Ha)	0.11
Proposed Number of additional pitches/plots	1	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA	Distance	7.73km-8.29km
	The Wash & North Norfolk Coast SAC Ouse Washes Ramsar/SAC/SPA/SSSI		8.29km

	Wiggenhall St. Germans SSSI		1.55km
--	--------------------------------	--	--------

Site Name/Settlement	Creakesville, The Common, South Creake, Fakenham	Site Reference	GT34
Site Capacity	Some remaining capacity	Site Area (Ha)	0.41
Proposed Number of additional pitches/plots	1	Ownership	Private
Nearby Habitat sites	North Norfolk Coast Ramsar	Distance	9.6km
	River Wensum SAC/SSSI		4.12km
	Holkham NNR		9.6km

Site Name/Settlement	The Pines, Methwold Road, Whittington	Site Reference	GT54
Site Capacity	Some remaining capacity	Site Area (Ha)	0.19
Proposed Number of additional pitches/plots	1	Ownership	Private
Nearby Habitat sites	Breckland SPA/SAC	Distance	4.07km
	Norfolk Valley Fens SAC		2.82km
	Ouse Washes Ramsar/SAC/SSSI/ SPA		14.09km
	Holkham NNR		8.69km
	Boughton Fen SSSI		2.75km

Site Name/Settlement	Victoria Barn, Land East of Basin Farm, Basin Road, Outwell	Site Reference	GT55
Site Capacity	Some remaining capacity	Site Area (Ha)	0.13
Proposed Number of additional pitches/plots	1	Ownership	Private

Nearby Habitat sites	The Wash NNR/Ramsar/SPA	Distance	21km
	Ouse Washes Ramsar/SAC/SSSI/ SPA		8.21km

Site Name/Settlement	Wheatley Bank, Walsoken (South of Worzals paralell to A47)	Site Reference	GT56
Site Capacity	Some remaining capacity	Site Area (Ha)	0.13
Proposed Number of additional pitches/plots	9	Ownership	Private
Nearby Habitat sites	The Wash NNR	Distance	13.83km
	Nene Washes Ramsar/SAC/SPA		12.5km
	Islington Heronry SSSI		8.89km

Site Name/Settlement	Spriggs Hollow	Site Reference	GT59
Site Capacity	Some remaining capacity	Site Area (Ha)	0.48
Proposed Number of additional pitches/plots	5	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA	Distance	20.15km
	Ouse Washes Ramsar/SAC/SPA/SSSI		1.5km

Site Name/Settlement	Redgate Farm, Magdalen Road, Tilney St Lawrence Travelling Showpeople	Site Reference	GT62
Site Capacity	Some remaining capacity	Site Area (Ha)	0.24
Proposed Number of additional pitches/plots	2	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA	Distance	11.07km
	Ouse Washes Ramsar/SAC/SPA/SSSI		11.33km

	Wiggenhall St. Germans SSSI		2.2km
--	--------------------------------	--	-------

Site Name/Settlement	Tall Trees, Downham Road Salters Lode Downham Market	Site Reference	GT65
Site Capacity	Some remaining capacity	Site Area (Ha)	0.47
Proposed Number of additional pitches/plots	5	Ownership	Private
Nearby Habitat sites	The Wash NNR/Ramsar/SPA	Distance	11.44km
	Ouse Washes Ramsar/SAC/SPA/SSSI		10.36
	Wiggenhall St. Germans SSSI		1.91km

Site Name/Settlement	Land at Brandon Road, Methwold	Site Reference	GT66
Site Capacity	Some remaining capacity	Site Area (Ha)	0.47
Proposed Number of additional pitches/plots	1	Ownership	Private
Nearby Habitat sites	Breckland SAC/SPA	Distance	0.27km
	Breckland Forest SSSI		0.27km

Appendix B: Detail on each of the Habitat Sites within King's Lynn and West Norfolk

The Wash		
Site Description Summary		Qualifying Features
<p>The Wash. 30/03/88; England; 62,212 ha; 52°56'N 000°17'E. Special Protection Area EC Directive; Nature Reserve, SSSI, Area of Outstanding Natural Beauty, Local Nature Reserve. A vast intertidal embayment incorporating one of the largest and most important areas of estuarine mudflats, sandbanks and saltmarsh in Britain. Counts of wintering waterbirds reach 320,673 individuals and include nationally and internationally important numbers of numerous species, notably up to 17,000 passerines (perching songbirds). The site is also of outstanding international importance for passage birds, notable waders, and supports various breeding birds, an important shell fishery, and the largest breeding colony in Europe of the seal <i>Phoca vitulina</i>. Adjoining land is used for intensive agriculture, and includes several localized industrial and residential zones. There are few public access points. Ramsar site no. 395. Most recent RIS information: 2007.</p> <p>SAC Description Sandbanks which are slightly covered by sea water all the time for which this is considered to be one of the best areas in the United Kingdom. Mudflats and sandflats not covered by seawater at low tide for which this is considered to be one of the best areas in the United Kingdom. Coastal lagoons for which the area is considered to support a significant presence. Large shallow inlets and bays for which this is considered to be one of the best areas in the United Kingdom. Reefs for which this is considered to be one of the best areas in the United Kingdom. <i>Salicornia</i> and other annuals colonising mud and sand for which this is considered to be one of the best areas in the United Kingdom. Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) for which this is considered to be one of the best areas in the United Kingdom. Mediterranean and 17enelop-Atlantic halophilous scrubs (<i>Sarcocornetea 17enelope17</i>) for which this is one of only four known outstanding localities in the United Kingdom. Which is considered to be rare as its total extent in the United Kingdom is estimated to be less than 1000 hectares. <i>Lutra</i></p>	H1110	Sandbanks which are slightly covered by sea water all the time; Subtidal sandbanks H1140. Mudflats and sandflats not covered by seawater at low tide; Intertidal mudflats and sandflats
	H1150	Coastal lagoons
	H1160	Large shallow inlets and bays
	H1170	Reefs
	H1310	<i>Salicornia</i> and other annuals colonising mud and sand; Glasswort and other annuals colonising mud and sand
	H1330	Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>)
	H1420	Mediterranean and 17enelop-Atlantic halophilous scrubs (<i>Sarcocornetea 17enelope17</i>); Mediterranean saltmarsh scrub
	S1355	<i>Lutra lutra</i> ; Otter
	S1365	<i>Phoca vitulina</i> ; Common seal

<p>lutra for which the area is considered to support a significant presence. Phoca vitulina for which this is considered to be one of the best areas in the United Kingdom.</p>		
		<p>SPA Objectives</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <p>The extent and distribution of the habitats of the qualifying features</p> <p>The structure and function of the habitats of the qualifying features</p> <p>The supporting processes on which the habitats of the qualifying features rely</p> <p>The population of each of the qualifying features, and,</p> <p>The distribution of the qualifying features within the site.</p>
<p>European Site Conservation Objectives for The Wash & North Norfolk Coast SAC – UK0017075 (naturalengland.org.uk)</p> <p>European Site Conservation Objectives for The Wash SPA – UK9008021 (naturalengland.org.uk)</p>		

<p>Dersingham Bog</p> <p>Dersingham Bog is the largest, and most intact example of an acid valley mire in East Anglia. The site lies in the Lower Greensand zone with the Sandringham Sands exposed in an old sandpit. The mire itself lies on shallow peat and has extensive areas dominated by bog mosses with several locally rare species of plant. The mire is bordered on one side by an escarpment, which marks the edge of an ancient coastline, which has large areas of heathland on its slopes. Self-regenerating pine woodland has developed on the top of the escarpment. The site also has considerable ornithological and entomological interest. On the lowest-lying land there is a strong iron pan formation on shallow peat with Common Cottongrass <i>Eriophorum angustifolium</i> as the</p>		
--	--	--

<p>dominant species. The main area dominated by Bog Mosses <i>Sphagnum</i> spp. Lies along the base of the escarpment. Several uncommon plants are present including Round-leaved Sundew <i>Drosera rotundifolia</i>, Bog Asphodel <i>Narthecium ossifragum</i>, Cranberry <i>Vaccinium oxycoccos</i> and White Beak Sedge <i>Rhynchospora alba</i>. Small bog pools are common in this zone which is widest at the southern end of the site. Within the mire are areas of wet heath and marshy grassland dominated by Cross-leaved Heath <i>Erica tetralix</i> and Purple Moor-grass <i>Molinia caerulea</i> respectively. In the damp heath areas, the rare moss <i>Dicranum spurium</i> is locally abundant as is the local <i>Sphagnum molle</i>. Scrub and young trees are encroaching on the bog in many places. Bog Myrtle <i>Myrica gale</i> is a common shrub on the mire and forms a dense area of scrub with Silver Birch <i>Betula pendula</i> at the northern end of the site. In the valley is a small piece of carr dominated by Alder <i>Alnus glutinosa</i>. Up the sides of the escarpment, there is a graduation from wet to dry heath which in turn grades to woodland. The heathland is dominated by Heather <i>Calluna vulgaris</i> but there are also large areas of Bracken <i>Pteridium aquilinum</i> on the slopes. The woodland is chiefly Scots Pine <i>Pinus sylvestris</i> and Silver Birch with Bracken in the field layer. <i>Rhododendron ponticum</i> is invasive in places. The site is noted for the presence of the dragonfly <i>Sympetrum scoticum</i>, a northern species with a very local distribution in SE England. The site is notable for the large breeding population of Shelduck, with up to 100 pairs nesting. The surrounding heathland is an important breeding site for Nightjars. Other local breeding species are Tree Pipit and Grasshopper Warbler and both Redshank and Curlew have nested. There is a colony of Sand Martins in the exposed face of the sandpit. Part of the site, Dersingham Pit, is of geological interest and is the type locality for the Dersingham Formation. It shows a section through the topmost Leziate Beds of the Sandringham Sands and the basal Dersingham Formation Sands. The latter underlies the Snettisham Clay locally. This is an important regional locality for elucidation of the Norfolk Lower Cretaceous rock sequences</p>		
<p>RAMSAR Principle Features</p>		
<p>Principal Features: The largest and most intact acid valley mire in the East Anglia region of England. It is believed to have developed at the foot of an ancient coastal cliff-line, bordered seawards by reclaimed saltmarshes, and now lies on</p>		

<p>shallow peat at the base of the steep scarp slope. The mire vegetation is characterised by <i>Narthecium ossifragum</i>, <i>Sphagnum</i> mosses and the cotton-grass <i>Eriophorum angustifolium</i>. Wet heath dominated by <i>Erica tetralix</i> occupies a narrow zone between the mire itself and dry heath dominated by <i>Calluna vulgaris</i> and <i>Pteridium aquilinum</i> on steeper slopes. Dry heath in turn grades into woodland with <i>Pinus sylvestris</i> and <i>Betula pendula</i>. The site supports an important assemblage of wetland plants, including several scarce mosses and liverworts associated with mire and wet heath. Wetland invertebrates are well represented and include a number of Red Data Book species, including the moths <i>Choristoneura lafauryana</i>, <i>Buckleria paludum</i> and <i>Yponomeuta rorrella</i>; several flies and the water beetle <i>Enochrus isotae</i>. The site also supports a notable assemblage of breeding birds, including <i>Tadorna tadorna</i>, <i>Caprimulgus europaeus</i>, <i>Numenius 20enelop</i> and <i>Tringa 20enelop</i>. (Criteria 2a,2b).</p>		
<p>NNR Designated Sites View (naturalengland.org.uk) Ramsar Designated Sites View (naturalengland.org.uk) SSSI detail (naturalengland.org.uk) European Site Conservation Objectives for Roydon Common & Dersingham Bog SAC – UK0012801 (naturalengland.org.uk) Dersingham Bog Ramsar Sites Information Service</p>		

Roydon Common		Qualifying Features
<p>Roydon Common. 05/03/93; England; 194 ha; 52°46'N 000°30'E. SSSI. A mixed valley mire exhibiting a classic sequence of vegetation types, linked to the varying hydrological characteristics of the site and influenced by the nutrient quality of the water. Several vulnerable or nationally scarce plant and invertebrate species are supported. The site provides nesting habitat for <i>Caprimulgus europaeus</i>, winter roosting sites for raptors <i>Circus cyaneus</i> and <i>Falco columbarius</i>. Ramsar site no. 588.</p>		
Roydon Common and Dersingham Bog SAC		Qualifying Features
<p>Roydon Common and Dersingham Bog represent the largest and best examples of crossleaved heath – bog-moss (<i>Erica tetralix</i> – <i>Sphagnum compactum</i>) wet heath in East Anglia. This vegetation community is part of a lowland mixed</p>	H4010.	Northern Atlantic wet heaths with <i>Erica tetralix</i> ; Wet heathland with cross-leaved heath
	H4030.	European dry heaths

<p>valley mire, a complex series of plant communities grading from wet acid heath through valley mire to calcareous fen. This gradation is of outstanding interest. The mire is extremely diverse and supports many rare plants, birds and insects, including the black darter dragonfly <i>Sympetrum scoticum</i>, a northern species with a very local distribution in south-east England. The site also contains an area of dry heathland, which is dominated by heather <i>Calluna vulgaris</i>, gorse <i>Ulex europaeus</i> and young silver birch <i>Betula pendula</i>, and has areas of bracken around the margins. There are examples of depressions on peat substrates in natural bog pools of patterned valley mire, in flushes on the margins of valley mire and locally in disturbed areas associated with trackways and paths in mire and wet heath. Mosaics containing this habitat type are important for bog orchid <i>Hammarbya paludosa</i></p>	H7150.	Depressions on peat substrates of the Rhynchosporion
		<p>Objectives</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <p>The extent and distribution of qualifying natural habitats</p> <p>The structure and function (including typical species) of qualifying natural habitats, and</p> <p>The supporting processes on which qualifying natural habitats rely</p>
<p>SAC Designated Sites View (naturalengland.org.uk)</p> <p>NNR Designated Sites View (naturalengland.org.uk)</p> <p>Ramsar Designated Sites View (naturalengland.org.uk)</p> <p>SSSI detail (naturalengland.org.uk)</p> <p>European Site Conservation Objectives for Roydon Common & Dersingham Bog SAC – UK0012801 (naturalengland.org.uk)</p> <p>Roydon Common Ramsar Sites Information Service</p>		

Ouse Washes		Qualifying Features
<p>Ouse Washes. 05/01/76; England; 2,469 ha; 52°29'N 000°12'E. Special Protection Area EC Directive; SSSI. Added to the Montreux Record, 31/10/00. A long, narrow area of seasonally flooded grassland providing flood storage, set between two channelized rivers. Wintering waterbirds regularly exceed 20,000 individuals, including nationally and internationally important numbers of wintering swans and various duck species. The site is of national importance for breeding ducks and waders. Human activities include traditional livestock grazing and hay production. Declining numbers of breeding waterfowl, changes in vegetation communities, and declining water quality, apparently caused by an increase in summer flooding, among other</p>		

<p>things, led the government to add Ouse Washes to the Montreux Record in October 2000. Subject of a Ramsar Advisory Mission in 2001. Ramsar site no. 77. Most recent RIS information: 1999.</p>		
<p>SAC</p>		<p>Qualifying Species</p>
<p>The Ouse Washes is one of the country's few remaining areas of extensive washland habitat. The associated dykes and rivers hold a great variety of aquatic plants; the pondweeds <i>Potamogeton</i> spp. Are particularly well represented. The associated aquatic fauna is similarly diverse and includes spined loach <i>Cobitis taenia</i>. The Counter Drain, with its clear water and abundant aquatic plants, is particularly important, and a healthy population of spined loach is known to occur.</p>		<p>Spined loach <i>Cobitis taenia</i></p> <p>SAC Objectives</p> <p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <p>The extent and distribution of the habitats of qualifying species</p> <p>The structure and function of the habitats of qualifying species</p> <p>The supporting processes on which the habitats of qualifying species rely</p> <p>The populations of qualifying species, and, The distribution of qualifying species within the site. This document should be read in conjunction with the accompanying Supplementary Advice document, which provides more detailed advice and information to enable the application and achievement of the Objectives set out above.</p>
<p>SPA</p>		<p>Qualifying Features</p>
<p>The Ouse Washes Ramsar site and proposed Special Protection Area is a wetland of major international importance comprising seasonally flooded washlands which are agriculturally managed in a traditional manner. It provides breeding and winter habitats for important assemblages of wetland bird species, particularly wildfowl and waders</p>	<p>A037</p> <p>A038</p> <p>A050</p> <p>A051</p> <p>A052</p> <p>A054</p>	<p>Cygnus columbianus bewickii; Bewick's swan (Non-breeding)</p> <p>Cygnus cygnus; Whooper swan (Non-breeding)</p> <p>Anas 22enelope; Eurasian wigeon (Non-breeding)</p> <p>Anas strepera; Gadwall (Breeding)</p> <p>Anas crecca; Eurasian teal (Non-breeding)</p> <p>Anas acuta; Northern pintail (Non-breeding)</p>

	A055	Anas querquedula; Garganey (Breeding)
	A056	Anas clypeata; Northern shoveler (Non-breeding)
	A056	Anas clypeata; Northern shoveler (Breeding)
	A082	Circus cyaneus; Hen harrier (Non-breeding)
	A151	Philomachus pugnax; Ruff (Breeding)
	A156a	Limosa limosa limosa; Black-tailed godwit (Breeding)
		Waterbird assemblage
	Breeding bird assemblage	
<p>Ramsar Designated Sites View (naturalengland.org.uk)</p> <p>SAC Designated Sites View (naturalengland.org.uk)</p> <p>SPA Designated Sites View (naturalengland.org.uk)</p> <p>SSSI detail (naturalengland.org.uk)</p> <p>European Site Conservation Objectives for Ouse Washes SPA – UK9008041 (naturalengland.org.uk)</p> <p>European Site Conservation Objectives for Ouse Washes SAC – UK0013011 (naturalengland.org.uk)</p>		

River Wensum SAC	Notable Species
<p>The Wensum SAC is a calcareous lowland river situated in the east of England. The river supports over 100 species of plants, including three species of water-crowfoot. The river also supports an eastern example of the riverine white-clawed crayfish and populations of Desmoulins whorl snail, Brook lamprey and Bullhead.</p>	White-clawed crayfish
<p>Geomorphological appraisal of the River Wensum Special Area of Conservation – ENRR685 (naturalengland.org.uk)</p> <p>SIP141008FINALv1.0 River Wensum.pdf</p>	

Bawsey SSSI	Notable Features
<p>Description and Reasons for Notification: In west Norfolk a discontinuous zone of till occurs separated from the main East Anglian till sheet by 5–10 km of Chalk outcrop. The age and origin of the till, the number of units present and their mode(s) of deposition are currently the subject of</p>	Geological interest

<p>much discussion and have a key bearing on interpreting Quaternary history in East Anglia. At Bawsey up to 5 m of till occurs above Cretaceous Sandringham Sands, comprising an upper unit, the Bawsey Calcareous Till, overlaying a lower unit, the Woodlands Farm Till. Bawsey is the type site for the former, and it provides one of the few reasonable exposures of the two tills. The site is also important for present and future work directed towards determining the origin of the west Norfolk tills and their relationships to the Marly Drift and Lowestoft Till which form the main till sheet of the region.</p> <p>SSSI detail (naturalengland.org.uk)</p>	
--	--

Blackborough End Pit SSSI	Notable Features
<p>This is an important site for the demonstration of regional stratigraphy and erosional relationships in the Lower Cretaceous. Here the Carstone rests on Leziate Beds, and the normally intervening Dersingham Beds are absent. It is therefore a key locality for the demonstration of sub-Carstone erosion (Albian) and the cutting out (removal) southwards of the successively older rock units by that formation.</p> <p>SSSI detail (naturalengland.org.uk)</p>	<p>Geological record</p>

Boughton Fen SSSI	Notable Species
<p>Boughton Fen is situated on shallow fen peats in the valley of a tributary of the River Wissey. A tall fen community covers much of the site and several interesting plants are present. Scrub is well represented and is used by breeding birds. The site is of entomological interest. Reed Phragmites australis forms an almost pure stand where the water-table is highest at the southern end of the site. The remainder of the site is of variable wetness and a more diverse fen community has developed. Reed is again dominant, but Meadowseet Filipendula ulmaria and Great Willowherb Epilobium hirsutum are abundant. And Hogweed Heracleum sphondylium. Several areas of</p>	<p>Phragmites australis Filipendula ulmaria Epilobium hirsutum Heracleum sphondylium. Valeriana officinalis Perizoma sagittaria Other species present include Common Valerian Valeriana officinalis, Hemp Agrimony Eupatorium cannabinum, Angelica Angelica sylvestris, Purple Small-Reed Calamagrostis canescens and Reed Sweet-Grass Glyceria maxima. On the highest ground, woodland has developed and is dominated by Ash Fraxinus excelsior and Alder Alnus glutinosa with some Willow</p>

<p>dense Blackthorn <i>Prunus spinosa</i> scrub are present on the drier parts of the site. Many uncommon species of moth have been recorded from the site, including the rare <i>Perizoma sagittaria</i>. Sedge, reed and grasshopper warblers all breed on the fen and otters are regular visitors.</p> <p>SSSI detail (naturalengland.org.uk)</p>	<p><i>Salix</i> sp. The ground flora consists of Meadowseet, Nettle <i>Urtica dioica</i>.</p>
--	---

Breckland Farmland SSSI	Notable Species
<p>Description: Breckland Farmland SSSI lies between Bury St Edmunds in Suffolk and Swaffham in Norfolk. Breckland is characterised by its climate and soils. Breckland's climate is semi-continental, being the driest region of the British Isles and subject to great extremes of temperature. The soils are complex, but typically are very sandy freedraining mixes of chalk, sand, silt, clay and flints. The predominant land use within the SSSI is arable. This is characterised by field scale vegetables and root crops, generally in rotation with cereals and outdoor pig units. Management for gamebirds is also a characteristic feature. Stone curlews nest from March each year in cultivated land which has plenty of bare ground and very short vegetation. Late sown spring crops such as sugar beet and vegetables are favoured. They also occupy set-aside where this has been rotovated. Stone curlews are very sensitive to recreational disturbance and benefit from lack of recreational access on agricultural land; they are not usually affected by mechanised agricultural operations. Other habitats such as grassland are used for foraging. A restored mineral working also supports breeding stone curlews. Breckland Farmland SSSI is adjoined by a number of heathland SSSIs which also provide breeding and foraging habitat for stone curlew.</p> <p>SSSI detail (naturalengland.org.uk)</p>	<p>Stone curlews</p>

Breckland Forest SSSI	Notable Species
<p>The clear fell areas and young plantations within Breckland Forest SSSI provide suitable breeding habitat for woodlark</p>	<p>knawel <i>Scleranthus perennis</i> subsp. <i>prostratus</i> (an English endemic restricted to the East Anglian Breckland),</p>

<p>Lullula arborea and nightjar Caprimulgus europaeus, which occur in internationally important numbers.</p> <p>Breckland Forest supports five vascular plants listed on Schedule 8 of the Wildlife and Countryside Act: perennial knawel Scleranthus perennis subsp. prostratus (an English endemic restricted to the East Anglian Breckland), red-tipped cudweed Filago lutescens, maiden pink Dianthus armeria, Breckland mugwort Artemisia campestris and spiked speedwell Veronica spicata subsp. spicata, the last of which was introduced at this site but within the UK is restricted to Breckland. The forest also supports an important assemblage of Nationally Rare and nationally scarce vascular plant species, a number of which are largely restricted to East Anglia and occupy habitats characteristic of Breckland. Breckland Forest SSSI also supports an exceptionally rich invertebrate fauna with Red Data Book and nationally scarce species across most taxonomic groups that have been studied.</p> <p>A mammal species associated with the conifer plantations is the red squirrel Sciurus vulgaris. Although the population is small it is the only one extant in East Anglia. Within Breckland Forest SSSI are three important geological areas, formerly notified as separate SSSIs. Warren Hill, High Lodge and Beeches Pit all provide evidence for interpreting and understanding the links between the geography, climate, environment and human history of East Anglia during the Middle Pleistocene.</p> <p>SSSI detail (naturalengland.org.uk)</p>	<p>red-tipped cudweed Filago lutescens, maiden pink Dianthus armeria, Breckland mugwort Artemisia campestris and spiked speedwell Veronica spicata subsp. Spicata Sciurus vulgaris (Red Squirrel)</p>
--	---

East Walton Common and Adcock's Common SSSI	Notable Species
<p>These two commons though lying about one kilometre apart have a similar topography, vegetation and management. Both are notable for a complex set of basin-shaped depressions separated by chalky ridges which were formed under periglacial conditions. Active springs are also a feature. This varied topography has resulted in a mosaic of habitats ranging from fen or occasionally open water in the depressions to chalk grassland or scrub on</p>	<p>red fescue Festuca rubra, sheep's fescue F. ovina, common bent Agrostis capillaris, crested hair-grass Koeleria macrantha quaking grass Briza media, downy oat-grass Helictotrichon pubescens heath-grass Danthonia decumbens glaucous sedge Carex flacca salad burnet Sanguisorba minor stemless thistle Cirsium acaule Cowslip Primula veris</p>

the intervening ridges. The two commons have traditionally been grazed by cattle. The topography of the area is of considerable geomorphological interest as the hollows and associated ridges are considered to be ground-ice depressions. These features are developed over chalk and superficial deposits of sandy chalk rubble and are the best developed in East Anglia and are among the finest in Britain. They are believed to have formed by differential thaw rates in ground ice during periglacial conditions in the Devensian glaciation. During this time East Anglia lay outside the limits of glaciation but was probably in a zone of permafrost. An alternative interpretation is that some of the features may represent fossil pingos. These are large perennial ice-cored mounds formed by the progressive growth of an ice-core where freezing water from springs is forced up at pressure; again these are indications of permafrost conditions. Both fresh and subdued examples of these features are found, implying two separate phases of formation.

The site is also of great botanical interest containing some of the finest unimproved grassland remaining in Norfolk. Chalk grassland occurs on the tops of the ridges as a very species-rich sward closely grazed by cattle and rabbits. It supports a rich mix of herbs and grasses including 7 locally rare species with as many as 32 species per metre. Dominant grasses include red fescue *Festuca rubra*, sheep's fescue *F. ovina*, common bent *Agrostis capillaris*, crested hair-grass *Koeleria macrantha* with smaller amounts of quaking grass *Briza media*, downy oat-grass *Helictotrichon pubescens* and heath-grass *Danthonia decumbens*. The glaucous sedge *Carex flacca* is frequent. Many herbs are present in the sward including salad burnet *Sanguisorba minor*, stemless thistle *Cirsium acaule*. Cowslip *Primula veris*, common rockrose *Helianthemum nummularium*, dropwort *Filipendula vulgaris*, small scabious *Scabiosa columbaria*, horseshoe vetch *Hippocrepis comosa*, squinancy wort *Asperula cynanchica*, thyme *Thymus pulegoides*, felwort *Gentianella amarella* and the locally rare field gentian *G. campestris*. In places the soils are deeper and less calcareous giving rise to a more

common rockrose *Helianthemum nummularium*
 dropwort *Filipendula vulgaris*
 small scabious *Scabiosa columbaria*
 horseshoe vetch *Hippocrepis comosa*
 squinancy wort *Asperula cynanchica*
 thyme *Thymus pulegoides*
 felwort *Gentianella amarella*
 field gentian *G. campestris*.
 heather *Calluna vulgaris*
 harebell *Campanula rotundifolia*
 tormentil *Potentilla erecta*
 bog bean *Menyanthes trifoliata*
 marsh cinquefoil *Potentilla palustris*
 jointed rush *Juncus articulatus*
 common reed *Phragmites australis*
 saw sedge *Cladium mariscus*
 tufted sedge *Carex elator*
 lesser tussock-sedge *Carex diandra*
 bottle sedge *Carex rostrata*
 purple moor-grass *Molinia caerulea*
 meadow thistle *Cirsium dissectum*
 black bog-rush *Schoenus nigricans*
 blunt-flowered rush *Juncus subnodulosus*
 butterwort *Pinguicula vulgaris*
 fragrant orchid *Gymnadenia conopsea* ssp. *Densiflora*
 marsh helleborine *Epipactis palustris*
 meadow thistle *Cirsium dissectum*,
 tawny sedge *Carex hostiana*
 moss *Drepanocladus vernicosus*
 water beetles - *Haliphus furcatus*,
Hydroporus scalesianus and *Hydraena palustris*
 hoverfly, *Cheilosia pubera*
 snail, *Vertigo moulinsiana*

mesotrophic vegetation and locally acid grassland characterised by patches of heather *Calluna vulgaris* with harebell *Campanula rotundifolia* and tormentil *Potentilla erecta*.

The majority of the hollows contain little or no open water but where standing water occurs there is a discrete community that includes bog bean *Menyanthes trifoliata*, marsh cinquefoil *Potentilla palustris* and jointed rush *Juncus articulatus*. Further stages in the succession are represented by swamp and semi-swamp communities dominated by common reed *Phragmites australis*, saw sedge *Cladium mariscus* and tufted sedge *Carex elator*. In some of the depressions, especially on Adcock's Common, a nationally rare plant community dominated by the lesser tussock-sedge *Carex diandra* and the bottle sedge *Carex rostrata* forms a semi-floating mat. Other hollows have a fen meadow community with purple moor-grass *Molinia caerulea* and meadow thistle *Cirsium dissectum* as characteristic species.

Springs emerge at a number of places on both commons and here small areas of short-sward, flushed calcareous fen have developed dominated by black bog-rush *Schoenus nigricans* and blunt-flowered rush *Juncus subnodulosus*. This community shows a remarkable diversity of fen species including butterwort *Pinguicula vulgaris*, fragrant orchid *Gymnadenia conopsea* ssp. *densiflora*, marsh helleborine *Epipactis palustris*, meadow thistle *Cirsium dissectum*, tawny sedge *Carex hostiana* and the rare moss *Drepanocladus vernicosus*.

There are also two fields adjacent to Adcock's Common with a fen meadow community and active springs which add diversity, together with areas of carr, woodland and scrub developed elsewhere on the site.

The two commons have a very rich invertebrate fauna with 28 Red Data Book and 79 nationally scarce species recorded since 1981. Almost all of the Red Data Book Species and most of the scarce species are associated with the fen or aquatic habitat; a few are associated with the dry grassland or scrub. The fauna includes an outstanding assemblage of water beetles which are considered to be

<p>fen relict species including <i>Haliplus furcatus</i>, <i>Hydroporus scalesianus</i> and <i>Hydraena palustris</i>. The site is also one of the most important for soldier and snail-killing flies in Britain, both families with predominately wetland species and regarded as useful indicators of habitat quality. There is also a large population of the Red Data Book hoverfly, <i>Cheilosia pubera</i>, which is dependent on marsh marigold <i>Caltha palustris</i>. The rare snail, <i>Vertigo moulinsiana</i> is also recorded from the fen areas.</p> <p>The wide range of habitats is attractive to many breeding birds which include snipe, woodcock, green woodpecker, nightingale and reed warbler.</p> <p>SSSI detail (naturalengland.org.uk)</p>	
---	--

East Winch Common SSSI	Notable Species
<p>An area of predominantly wet acid heathland on shallow peat of a type that has become rare in west Norfolk. Many wet hollows are present containing diverse fen and mire communities. One rare plant species occurs and also several uncommon species. The site is surrounded by young woodland.</p> <p>The wet heathland is dominated by heather <i>Calluna vulgaris</i> with crossleaved heath <i>Erica tetralix</i> co-dominant and with abundant purple moorgrass <i>Molinia caerulea</i> and bog mosses <i>Sphagnum</i> spp. Cross-leaved heath and bog mosses are abundant in the wet hollows where several interesting species are present including sundew <i>Drosera rotundifolia</i>, sneezewort <i>Achillea ptarmica</i>, bog pimpernel <i>Anagallis tenella</i>, common cotton-grass <i>Eriophorum angustifolium</i> creeping willow <i>Salix repens</i> and the rare marsh gentian <i>Gentiana pneumonanthe</i>.</p> <p>In hollows where the peats are less acid, a fen-type community has developed that is dominated by yellow iris <i>Iris pseudacorus</i> and bluntflowered rush <i>Juncus subnodulosus</i> and in these areas the southern marsh orchid <i>Dactylorhiza praetermissa</i> is abundant. Gorse <i>Ulex europaeus</i> and silver birch <i>Betula pendula</i> are common and bracken <i>Pteridium aquilinum</i> dominates the drier areas of the open heath.</p>	<p>heather <i>Calluna vulgaris</i> heather crossleaved heath <i>Erica tetralix</i> purple moorgrass <i>Molinia caerulea</i> bog mosses <i>Sphagnum</i> spp sundew <i>Drosera rotundifolia</i> sneezewort <i>Achillea ptarmica</i> bog pimpernel <i>Anagallis tenella</i>, common cotton-grass <i>Eriophorum angustifolium</i> creeping willow <i>Salix repens</i> rare marsh gentian <i>Gentiana pneumonanthe</i> Iris <i>pseudacorus</i>, bluntflowered rush <i>Juncus subnodulosus</i> southern marsh orchid <i>Dactylorhiza praetermissa</i> Gorse <i>Ulex europaeus</i> silver birch <i>Betula pendula</i> bracken <i>Pteridium aquilinum</i>, oak <i>Quercus robur</i>, softgrass <i>Holcus mollis</i>, enchanter's nightshade <i>Circaea lutetiana</i></p>

<p>The surrounding woodland consists mainly of silver birch and oak <i>Quercus robur</i> with abundant willow scrub in the wetter areas. The ground flora is generally sparse and includes bracken, creeping softgrass <i>Holcus mollis</i> and enchanter's nightshade <i>Circaea lutetiana</i>. Among the more interesting breeding birds are nightingale and grasshopper warbler. SSSI detail (naturalengland.org.uk)</p>	
---	--

Grimston Warren Pit SSSI	Notable Species
<p>Grimston Warren Pit is a small disused quarry located approximately 3 kilometres Eastnorth-east of King's Lynn. The quarry provides an outstanding opportunity to examine the constituent facies of the Dersingham Formation, a sequence of yellow to rusty coloured clay-rich sands. Beneath these are clean white sands assigned to the Sandringham Formation (Leziate Beds). The Dersingham sands are particularly important as they have yielded the ammonite <i>Endemoceras</i> which indicates an Early Cretaceous (Hauterivian) age. Grimston Warren Pit is a nationally important site for dating the constituent facies of the Lower Cretaceous in north Norfolk and for elucidating the palaeoenvironmental conditions which existed during Hauterivian times. SSSI detail (naturalengland.org.uk)</p>	<p>ammonite <i>Endemoceras</i> (fossil)</p>

Heacham Brick Pit SSSI	Notable Features
<p>Heacham Brick Pit is a locality which affords the only opportunity to examine the Lower Cretaceous Snettisham Clay. This has yielded distinctive Lower Barremian ammonite faunas. A key site in the assessment of regional stratigraphy and in correlations of Lower Cretaceous strata showing a facies rarely exposed and of limited areal extent. SSSI detail (naturalengland.org.uk)</p>	<p>Area valuable for the Geological record</p>

Hilgay Heronry SSSI	Notable species
<p>Hilgay Heronry is a small copse on the edge of the Fens which supports a</p>	<p>breeding colony of Grey Herons <i>Ardea cinerea</i></p>

nationally important breeding colony of Grey Herons <i>Ardea cinerea</i> . There is an average of about 40 occupied nests each year in the mature trees of European Larch <i>Larix decidua</i> and Ash <i>Fraxinus excelsior</i> . The nearby fenland with an extensive system of drainage dykes provides ideal feeding conditions for the birds. SSSI detail (naturalengland.org.uk)	European Larch <i>Larix decidua</i> Ash <i>Fraxinus excelsior</i>
--	--

Hunstanton Park Esker² SSSI	Notable Features
This site is important for an esker of Devensian age which extends ca. 1.5 km from north of Ringstead Downs to Hunstanton Hall. The esker is particularly well developed in its central and southern sections, and occasional sections assist in demonstrating the internal structure, composition and genesis of this type of glaciofluvial landform. Hunstanton Park provides a good example of a landform which is relatively uncommon in central and southern England and is the only one of Devensian age in the area. SSSI detail (naturalengland.org.uk)	Geological record

Hunstanton Cliffs SSSI	Notable Features
A classic and much-quoted locality for the Red Chalk and the underlying Carstone which contains an exceptionally rich Albian ammonite fauna. This is an important locality for the study of the sedimentology of these normally poorly exposed formations, in the area where the Carstone is thickly developed. The site also provides the best exposure of the (Upper Cretaceous) Ferriby Chalk Formation in Norfolk. The Cenomanian Chalk includes a regionally important marker horizon, the Paradoxica Band, and a calcarenite ("coarse grained") bed near the top of the section resembling the Totternhoe Stone of the Chilterns. A key site showing a condensed Lower–Upper Cretaceous (Albian–Cenomanian) sequence important for both research and	Fossil and Geological record

² According to Google Dictionary an esker is a long ridge of gravel and other sediment, typically having a winding course, deposited by meltwater from a retreating glacier or ice sheet.

<p>field education. Additional biological interest is provided by a breeding colony of Fulmars on the cliff face. This is the largest colony on the east coast of England, south of Flamborough Head.</p> <p>SSSI detail (naturalengland.org.uk)</p>	
---	--

Islington Heronry SSSI	Notable Species
<p>Islington Heronry is a small, isolated stand of mature oaks surrounded by fenland which supports the largest colony of Grey Herons <i>Ardea cinerea</i> in Norfolk. There is an average of about 80 occupied nests each year and the adjacent dykes provide ideal feeding conditions for the birds. Several species of woodland birds, such as Great Spotted Woodpecker, are also present in the wood and represent isolated populations separated from nearby woods by many kilometres of farmland</p> <p>SSSI detail (naturalengland.org.uk)</p>	<p>Grey Herons <i>Ardea cinerea</i></p>

Leziate, Sugar & Derby Fens SSSI	Notable Species
<p>Reasons for Notification: These three fens are the remnants of a once extensive valley fen system along the Gaywood River. The site has dried out considerably in recent years due to the drainage of surrounding agricultural land but a wide range of habitats, from dry calcareous grassland to wet boggy heath, is still present. These diverse plant communities reflect variations in the underlying soils. Much of the site is on the greensand belt and here, extensive areas of damp acidic grassland and heath have developed.</p> <p>The Gaywood River is fed by chalk springs and locally there is species-rich calcareous grassland on chalky soils.</p> <p>Leziate Fen</p> <p>Much of this area consists of seasonally wet, rough grassland on thin acidic peats. The sward includes Purple Moor-grass <i>Molinia caerulea</i>, Sheep's Fescue <i>Festuca ovina</i>, Common Bent <i>Agrostis capillaries</i>, Sheep's Sorrel <i>Rumex acetosella</i> and Soft Rush <i>Juncus effuses</i> is dominant or co-dominant species with Marsh Pennywort <i>Hydrocotyle vulgaris</i>, Devil's bit Scabious <i>Succisa pratensis</i>, Tormentil <i>Potentilla erecta</i> and Bottle Sedge <i>Carex rostrata</i>. Heather <i>Calluna vulgaris</i> and Cross-leaved Heath <i>Erica tetralix</i> are locally frequent</p>	<p>Purple Moor-grass <i>Molinia caerulea</i>, Sheep's Fescue <i>Festuca ovina</i>, Common Bent <i>Agrostis capillaries</i>, Sheep's Sorrel <i>Rumex acetosella</i>, Soft Rush <i>Juncus effuses</i>, Marsh Pennywort <i>Hydrocotyle vulgaris</i>, Devil's bit Scabious <i>Succisa pratensis</i>, Tormentil <i>Potentilla erecta</i>, Heather <i>Calluna vulgaris</i>, Cross-leaved Heath <i>Erica tetralix</i>, Common Cotton-grass <i>Eriophorum angustifolium</i>, Creeping Willow <i>Salix repens</i>, Bog Pimpernel <i>Anagallis tenella</i>, Red Fescue <i>Festuca rubra</i>, Quaking Grass <i>Briza media</i>, Stemless Thistle <i>Cirsium acaule</i>, Purging Flax <i>Linum catharticum</i>, Autumn Felwort <i>Gentianella amarella</i>, Creeping Buttercup <i>Ranunculus repens</i>, Lesser Spearwort <i>R. flammula</i>, Water Mint <i>Mentha aquatica</i>, Alder <i>Alnus glutinosa</i>, Creeping Bent <i>Agrostis stolonifera</i>, Ragged Robin <i>Lychnis flos-cuculi</i>, Southern Marsh Orchid <i>Dactylorhiza praetermissa</i>, Marsh Marigold <i>Caltha palustris</i>.</p>

<p>around an area of young, secondary Birch woodland and other notable species include Common Cotton-grass <i>Eriophorum angustifolium</i>, Creeping Willow <i>Salix repens</i> and Bog Pimpernel <i>Anagallis tenella</i>. An unusual area of ridges and furrows occurs on part of the fen. The calcareous ridges support a diverse rabbit-grazed sward that includes Red Fescue <i>Festuca rubra</i>, Quaking Grass <i>Briza media</i>, Stemless Thistle <i>Cirsium acaule</i>, Purging Flax <i>Linum catharticum</i> and Autumn Felwort <i>Gentianella amarella</i>. The damp furrows are dominated by Creeping Buttercup <i>Ranunculus repens</i> with Lesser Spearwort <i>R. flammula</i>, Water Mint <i>Mentha aquatica</i> and Meadowsweet <i>Filipendula ulmaria</i>.</p> <p>Sugar Fen</p> <p>Damp Birch woodland with frequent Alder <i>Alnus glutinosa</i> on the wettest soils covers much of this fen. Small areas of fen grassland occur on the edges of the woodland and are dominated by Creeping Bent <i>Agrostis stolonifera</i> with Ragged Robin <i>Lychnis flos-cuculi</i>, Water Mint, Southern Marsh Orchid <i>Dactylorhiza praetermissa</i> and Marsh Marigold <i>Caltha palustris</i>.</p> <p>SSSI detail (naturalengland.org.uk)</p>	
--	--

Ringstead Downs SSSI	Notable Species
<p>Ringstead Downs is a dry valley that has been cut through chalk strata by glacial meltwaters. The site has never been ploughed and as a result the valley-sides support an excellent example of species-rich chalk grassland. Such areas of unimproved chalk grassland are now extremely rare in East Anglia and the site is the largest example of chalk downland now remaining in Norfolk. The short, rabbit-grazed chalk grassland is dominated by Red Fescue <i>Festuca rubra</i> and Sheep's Fescue <i>F. ovina</i> with abundant Common Rock-rose <i>Helianthemum nummularium</i> and Salad Burnet <i>Sanguisorba minor</i>. The most diverse grassland occurs on warm, sunny, south-facing slopes and a wide variety of characteristic herbs is present including Squinancywort <i>Asperula cynanchica</i>, Dwarf Thistle <i>Cirsium acaule</i>,</p>	<p>Red Fescue <i>Festuca rubra</i>, Sheep's Fescue <i>F. ovina</i>, Common Rock-rose <i>Helianthemum nummularium</i>, Salad Burnet <i>Sanguisorba minor</i>, Squinancywort <i>Asperula cynanchica</i>, Dwarf Thistle <i>Cirsium acaule</i>, Wild Thyme <i>Thymus praecox</i>, Dropwort <i>Filipendula vulgaris</i>, Burnet Saxifrage <i>Pimpinella saxifraga</i>, Small Scabious <i>Scabiosa columbaria</i>, Eyebright <i>Euphrasia officinalis</i>, Bee Orchid <i>Ophrys apifera</i>.</p>

<p>Wild Thyme <i>Thymus praecox</i>, Dropwort <i>Filipendula vulgaris</i>, Burnet Saxifrage <i>Pimpinella saxifraga</i>, Small Scabious <i>Scabiosa columbaria</i> and Eyebright <i>Euphrasia officinalis</i>. An old chalk-pit contains small areas of chalk grassland with Bee Orchid <i>Ophrys apifera</i>. Scrub and mature secondary woodland occurs on the upper slopes of the valley. The abundant herb species are attractive to a wide range of butterflies, but a local race of the uncommon Chalkhill Blue, which used to occur, has not been seen in recent years. SSSI detail (naturalengland.org.uk)</p>	
---	--

River Nar SSSI	Notable Species
<p>The River Nar originates as a spring-fed stream, west of Mileham in Norfolk and flows for 42 km before joining the River Great Ouse at King's Lynn, where a sluice prevents the penetration of seawater at high tide. The River combines the characteristics of a southern chalk stream and an East Anglian fen river. Together with the adjacent terrestrial habitats, the Nar is an outstanding river system of its type. The solid geology of the catchment is dominated by chalk of the Upper Cretaceous, which is overlain by glacial drift deposits of varying thickness. The source of the Nar lies in an area of clays, sands and gravels, though near Castle Acre this gives way to exposed chalk. At West Acre the Nar flows over the river valley gravels and then over alluvial silt from Narborough through the fens. The river water is base-rich, alkaline and recharged by clear springs flowing from the underlying chalk. The upper Nar has a wide range of natural physical features incorporating riffles, pools, gravel beds and meanders, whilst the lower reaches below Narborough are embanked and steep sided with water flowing sluggishly through a predominantly arable flood plain. The variation in physical features and the influence of the underlying chalk give rise to a rich and diverse flora. Amongst the 78 species of riverine and bankside plants are many eutrophic and mesotrophic species, including 5 pondweeds and 8 bryophytes. The flora of the first 10 km of the river, to West Lexham, is typical of a calcareous,</p>	<p>78 species of riverine and bankside plants. starwort <i>Callitriche</i> spp., reed sweetgrass, <i>Glyceria maxima</i>, narrow-leaved waterparsnip, <i>Berula erecta</i>; mare's-tail, <i>Hippuris vulgaris</i>; greater tussock-sedge, <i>Carex paniculata</i>; water crowfoot, <i>Ranunculus pseudofluitans</i> var. <i>Vertumnus</i>, <i>Groenlandia densa</i>, <i>Potamogeton</i> spp., hornwort, <i>Ceratophyllum demersum</i>, water-milfoil, <i>Myriophyllum spicatum</i>, river water-dropwort, <i>Oenanthe aquatica</i>, brown trout, <i>Salmo trutta</i>. pike, <i>Esox Lucius</i>, roach, <i>Rutilus rutilus</i>, eel, <i>Anguilla Anguilla</i>, <i>Leuciscus cephalus</i>, tench, <i>Tinca tinca</i>, gudgeon, <i>Gobio gobio</i>, rudd, <i>Scardinius erythrophthalmus</i>, bullhead, <i>Cottus gobio</i>, rainbow trout, <i>Salmo gairdneri</i>, spined loach, <i>Cobitis taenia</i>, southern marsh orchid, <i>Dactylorhiza majalis</i> subsp. <i>Praetermissa</i>, yellow rattle, <i>Rhinanthus minor</i>, bogbean, <i>Menyanthes trifoliata</i>, Breeding birds include snipe, lapwing, redshank, sedge and grasshopper warblers; Kingfishers, sand martins, grey wagtail, reed warblers, teal,</p>

lowland ditch community with an abundance of starwort *Callitriche* spp. and reed sweetgrass, *Glyceria maxima*. The next 12 km of the River, to Narborough Mill, is fast flowing over stoney substrates and is rich in chalk stream plants including narrow-leaved waterparsnip, *Berula erecta*; mare's-tail, *Hippuris vulgaris*; greater tussock-sedge, *Carex paniculata*; water crowfoot, *Ranunculus pseudofluitans* var. *vertumnus* and opposite-leaved pondweed, *Groenlandia densa*. The wet margins, with a constantly high water table typical of chalk streams, support a wide range of emergent plants. The final 18.5 km is embanked and although less physically diverse than the upper reaches, it possesses a contrasting flora with several species not found in the upper river. These plants are characteristic of sluggish flows and include 3 pondweeds, *Potamogeton* spp.; 2 water crowfoots, *Ranunculus* spp.; hornwort, *Ceratophyllum demersum*; water-milfoil, *Myriophyllum spicatum*; and river water-dropwort, *Oenanthe aquatica*.

The Nar is well-known locally for its brown trout, *Salmo trutta*. Since 1985, trout numbers have increased steadily; pike, *Esox lucius*, numbers have remained fairly stable whilst roach, *Rutilus rutilus*, and eel, *Anguilla anguilla*, have continued to be the dominant species in the river. A further 11 species have been recorded in the Nar although they contribute only a small amount to the total fish biomass e.g.: chubb, *Leuciscus cephalus*; tench, *Tinca tinca*; gudgeon, *Gobio gobio*; rudd, *Scardinius erythrophthalmus*; bullhead, *Cottus gobio*; rainbow trout, *Salmo gairdneri*; spined loach, *Cobitis taenia*; and roach x bream, *Abramis brama*, hybrids.

The chalk acts as a natural aquifer and thus maintains flows throughout the year, peaking in the spring with frequent flooding of adjacent land. This has led to the development of a range of adjacent semi-natural inundation communities and wetland habitats. Many have their water-tables intricately linked to and therefore dependent on the river whilst others are dependent on seasonal inundation. In the upper reaches of the river extensive areas of traditionally managed unimproved pasture survive. A combination of summer cattle grazing and hay making have

marsh harriers,
willow and marsh tits,
12 different species of dragonfly.

<p>encouraged the establishment of a variety of wetland species, including southern marsh orchid, <i>Dactylorhiza majalis</i> subsp. <i>praetermissa</i>; yellow rattle, <i>Rhinanthus minor</i>, and bogbean, <i>Menyanthes trifoliata</i>. Where land adjacent to the river is seasonally flooded and has not been reclaimed as pasture, areas of rough fen and unmanaged scrub remain. Further downstream this scrub has developed into mature wet woodland, dominated by alder carr. The result is a river corridor of considerable importance to wildlife.</p> <p>Although the river channel can be regarded as nationally important in its own right, the quality and type of adjacent habitats increases its value for fauna which use both the river and floodplain. Breeding birds include snipe, lapwing, redshank, sedge and grasshopper warblers.</p> <p>The variations in river profile including slope, width and depth are important factors in the provision of nesting sites for kingfishers and sand martins, and the combination of water meadow, fen, scrub and woodland in the upper Nar provides feeding and resting grounds for a number of other birds including grey wagtail, reed warblers, teal, marsh harriers, willow and marsh tits. Entomological studies are incomplete but 12 different species of dragonfly were recorded in 1991 at several locations along the Nar; this represents an outstanding assemblage for the UK SSSI detail (naturalengland.org.uk)</p>	
---	--

Setchey SSSI	Notable Features
<p>Setchey is important for studies of Flandrian sea-level change. The stratigraphy conforms to the typical Fenland sequence of a lower peat layer on a weathered till, a marine/brackish clay, a second peat layer, and a surface marine/estuarine clastic bed. The site is important as part of the overall network of Fenland sites, allowing a correlation across the area from west to east.</p> <p>SSSI detail (naturalengland.org.uk)</p>	Fenland

Snettisham Carstone Quarry SSSI	Notable Species
--	------------------------

<p>Snettisham Carstone Quarry is the only known locality in Britain for the micro-moth <i>Nothris verbascella</i>. Its host species, hoary mullein <i>Verbascum pulverulentum</i>, a plant of banks and waste places, is restricted to East Anglia, but is abundant on the old workings in the quarry. Larvae of the moth feed in a web on the underside of the leaves of hoary mullein from September until the following summer. Pupation occurs in situ, usually on the underside of the same leaf and adults appear in July. SSSI detail (naturalengland.org.uk)</p>	<p>micro-moth <i>Nothris verbascella</i>, hoary mullein <i>Verbascum pulverulentum</i>.</p>
---	---

Syderstone Common SSSI	Notable Species
<p>Description: Syderstone Common consists of a series of heath and grassland communities occupying a shallow valley in the headwaters of the River Tat, a tributary of the River Wensum. These communities grade from dry heath dominated by gorse scrub, but with areas of bracken <i>Pteridium aquilinum</i>, heather <i>Calluna vulgaris</i> and acid grassland dominated by wavy hair grass <i>Deschampsia flexuosa</i>, to marshy, acid grassland dominated by purple moor grass <i>Molinia caerulea</i> and rushes <i>Juncus</i> spp. In the lowest areas there are a series of seasonally wet pools. Much of the heathland and the gorse dominated area also supports hawthorn <i>Crataegus monogyna</i> scrub and developing birch <i>Betula pendula</i> woodland. Interesting plants found in the heathland include petty whin <i>Genista anglica</i> and dodder <i>Cuscuta epithymum</i>. The soils of Syderstone Common are glacially derived sands and gravels overlying chalk. Because of this the pools, although surrounded by acid heathland, contain neutral to alkaline water. This provides suitable conditions for breeding colonies of five species of amphibian including a viable population of natterjack toads <i>Bufo calamita</i>. These toads are a nationally rare species and are protected under Section 9 of the 1981 Wildlife and Countryside Act. Syderstone Common is one of only two inland heathland colonies of natterjack toads that are known to have survived recent habitat losses and disturbance and it is the more viable of the two. It is also one of only three breeding colonies now known in East Anglia</p>	<p>bracken <i>Pteridium aquilinum</i>, heather <i>Calluna vulgaris</i>, wavy hair grass <i>Deschampsia flexuosa</i>, purple moor grass <i>Molinia caerulea</i>, rushes <i>Juncus</i> spp, hawthorn <i>Crataegus monogyna</i>, birch <i>Betula pendula</i>, petty whin <i>Genista anglica</i>, dodder <i>Cuscuta epithymum</i>, natterjack toads <i>Bufo calamita</i> (breeding colony)</p>

The Brinks (Northwold Meadows) SSSI	Notable Species
<p>Northwold Meadows consists of three adjacent unimproved meadows with a history of cattle and sheep grazing. They cover an extensive area on the northern side of the String Drain in a shallow valley and are mostly bordered to the south and east by conifer plantations and to the north by arable. The attractive herb-rich grassy sward is a mix of areas of moderately tall herbage and tightly grazed lawns. A mosaic of plant communities is developed on a range of soils which are mostly well drained being derived from the chalks and drift, though those underlying the western meadow have a higher clay content and are generally less well drained. Soil reactions range from calcareous and neutral to slightly acidic and this is reflected in the plant communities present which have a range of plants from chalk-loving to acidic-loving species. In addition to the grassland there are small areas of hazel coppice, woodland and scattered pine particularly in the south-east corner and some hawthorn scrub in the western meadow. A number of ponds and seasonally wet depressions also occur. Over 140 flowering plants have been recorded from the site. In Norfolk as a whole such meadows are rare and none are known in West Norfolk or the Breckland Natural Area. The less well drained soils support a mesotrophic grassland which is the Meadow Vetchling <i>Lathyrus pratensis</i> variant of the Crested Dog's-tail <i>Cynosurus cristatus</i>–Black Knapweed <i>Centaurea nigra</i> community. The sward includes Red Fescue <i>Festuca rubra</i>, Downy Oat-grass <i>Helictotrichon pubescens</i>, Quaking grass <i>Briza media</i>, and the herbs Black Knapweed <i>Centaurea nigra</i>, Daisy Bellis <i>perennis</i>, Pepper Saxifrage <i>Silaum silaus</i>, Birds-foot Trefoil <i>Lotus corniculatus</i>, Meadow Vetchling <i>Lathyrus pratensis</i>, Adderstongue fern <i>Ophioglossum vulgare</i>, Green-winged Orchid <i>Orchis morio</i>, Early Marsh Orchid <i>Dactylorhiza incarnata</i> and Common Spotted Orchid <i>Dactylorhiza 38uchsia</i>. The better drained soils partly support the Lady's Bedstraw <i>Galium verum</i> variant of this mesotrophic grassland. Species present include the grasses Meadow Oat-grass <i>Avenula pratensis</i>,</p>	<p>Over 140 flowering plants Red Fescue <i>Festuca rubra</i>, Downy Oat-grass <i>Helictotrichon pubescens</i>, Quaking grass <i>Briza media</i>, Black Knapweed <i>Centaurea nigra</i>, Daisy Bellis <i>perennis</i>, Pepper Saxifrage <i>Silaum silaus</i>, Birds-foot Trefoil <i>Lotus corniculatus</i>, Meadow Vetchling <i>Lathyrus pratensis</i>, Adderstongue fern <i>Ophioglossum vulgare</i>, Green-winged Orchid <i>Orchis morio</i>, Early Marsh Orchid <i>Dactylorhiza incarnata</i>, Common Spotted Orchid <i>Dactylorhiza 38uchsia</i>. Lady's Bedstraw <i>Galium verum</i>, Meadow Oat-grass <i>Avenula pratensis</i>, Sweet Vernal Grass <i>Anthoxanthum odoratum</i>, Yorkshire-fog <i>Holcus lanatus</i>, Crested Hair-grass <i>Koeleria cristata</i>, Perennial Rye-grass <i>Lolium perenne</i>, Heath Woodrush <i>Luzula campestris</i>, Salad Burnet <i>Sanguisorba officinalis</i>, Red Clover <i>Trifolium pratense</i>, Hoary Plantain <i>Plantago media</i>, Creeping Willow <i>Salix repens</i>.</p>

<p>Downy Oat-grass <i>Helictotrichon pubescens</i>, Sweet Vernal Grass <i>Anthoxanthum odoratum</i>, Red Fescue <i>Festuca rubra</i>, Yorkshire-fog <i>Holcus lanatus</i>, Crested Hair-grass <i>Koeleria cristata</i>, Perennial Rye-grass <i>Lolium perenne</i> and the herbs, Black Knapweed <i>Centaurea nigra</i>, Heath Woodrush <i>Luzula campestris</i>, Salad Burnet <i>Sanguisorba officinalis</i>, Red Clover <i>Trifolium pratense</i> and Hoary Plantain <i>Plantago media</i>. Creeping Willow <i>Salix repens</i> is also present in this community. SSSI detail (naturalengland.org.uk)</p>	
---	--

Wiggenhall St Germans SSSI	Notable Features
<p>Wiggenhall St Germans was one of the first sites in Britain to be investigated for sea-level studies using pollen and foraminifera analyses. The sequence of deposits is dominated by fine-grained clastic sediments intercalated by three peat layers and with a thin basal peat.</p> <p>The site is important both historically and for future research. Detailed analysis of the whole sequence of deposits together with radiocarbon dating will provide much useful palaeoenvironmental and chronological information.</p> <p>SSSI detail (naturalengland.org.uk)</p>	<p>Geological and fossil record</p>

Wretton SSSI	Notable Features
<p>At Wretton a complex series of late Pleistocene (Ipswichian–Devensian) terrace deposits of the River Wissey have been exposed in the sides of a cut-off channel. The Devensian deposits are of unique interest because they record the most complete sequence of Early Devensian deposits containing stratigraphically useful pollen, molluscs, beetles and vertebrates, collectively making this a key stratigraphic locality. Fluvial deposits here contain abundant fossil mammal remains. This assemblage includes wolf, arctic fox, bear, reindeer, bison and woolly rhinoceros making Wretton Britain's richest vertebrate locality of early Devensian age.</p> <p>SSSI detail (naturalengland.org.uk)</p>	<p>Fossil record</p>

